

Ontario Ministry of Labour

Occupational Health and Safety Division A Directory of Occupational Health and Safety in Ontario

CAZØN L190 - D35



One of the major concerns of the Ontario Ministry of Labour is the safety and health of the province's work force. The government obviously must play a major role in this area but the passage of legislation and the introduction of regulations is only one aspect. Joint action by government, management and labour will greatly enhance our ability to create a healthy and safe workplace.

The government has a responsibility to set realistic standards and develop guidelines but management has a responsibility to see that these are met while labour has a responsibility to give its co-operation in all the appropriate programs. The medical and scientific community too, have an obligation to contribute their expertise and educational institutions must support this work by providing education, training and special services as these are required.

In this publication, we have brought together information on a wide range of organizations involved in occupational health and safety in Ontario. We hope that the information will be helpful to individuals looking for assistance in developing health and safety programs and be a source of reference for all those working in the field.

Rodney may

Rodney May, F.R.C.P.(C), D.I.H. Assistant Deputy Minister Occupational Health and Safety Division Ontario Ministry of Labour

Occupational Health and Safety Division

Standards and Programs
Branch

A Directory of Publication Occupational Health and Safety in Ontario

Introduction

The intent of this publication is to meet the need for the provision of information on occupational health and safety programs and services available in the province.

These include programs and services carried out by government, safety organizations, laboratories and others.

The activities of the newly formed Occupational Health and Safety Division (O.H.S.D.) under the Ministry of Labour are also described. O.H.S.D. was formed through the integration and reorganization of the Occupational Health Protection Branch, previously Ministry of Health, the Mines Engineering Branch, previously Ministry of Natural Resources, and the Industrial Safety, Construction Safety and Staff Branches, Ministry of Labour.

This edition is our first attempt in identifying groups involved in a wide range of activities in occupational health and safety. The last chapter, on Laboratory Testing Facilities, was prepared during a very limited period of time and should be looked on as a starting point only.

The information presented here includes addresses, contacts, objectives, activities, testing capabilities, and in some cases, publications, funds and research.

This publication is intended to be expanded and regularly up-dated.

We wish to acknowledge the support of our contacts in providing documentation and welcome suggestions and information on new activities.

Occupational Health and Safety Division

Standards and Programs Branch (416) 965-8510



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Canada Department of Energy, Mines and Resources

Explosives Branch
Berger Building
100 Metcalfe Street
Ottawa, Ontario
K1A 0E4

Contact

B.P. McHugh, Director Ontario Regional Inspectors: L.B. Buchanan, P.A. Houldsworth (613) 593-7211

Objectives

To promote public and worker safety through the control of the manufacture, authorization, sales, storage, importation and road transportation of explosives.

Activities

Administers and enforces, with the assistance of the R.C.M.P., the Explosives Act and its regulations. Explosives governed by the Act include black powder, blasting explosives, detonators, sporting ammunition, pyrotechnic devices, etc.

Publications

(Aussi disponibles en français)
Explosives Act and Regulations
Storage, Transportation, Destruction
and Sale of Blasting Explosives and
Detonators

Standards for Blasting-Explosives Magazines Standards for Type 6 (Receptacle) Blasting-Explosives Magazines Trucking Explosives in Canada The Handling of Explosives Explosives are for Experts Fireworks Manual-Class 7.2.2 Report of the Explosives Branch

National Health and Welfare

Health Protection Branch Tunney's Pasture Ottawa, Ontario K1A OL2

Ontario Regional Office 2301 Midland Avenue Scarborough, Ontario M1P 4R7 (416) 291-4231

Contact

Rene Mercier, Media Relations Officer (613) 996-7170

Objectives

The Health Protection Branch is composed of six operational Directorates: Food, Drugs, Environmental Health, Laboratory Centre for Disease Control, Non-Medical Use of Drugs and Field Operations. The Branch was formed to develop a total integrated program to protect the public against unsafe foods, drugs, cosmetics, medical and radiation-emitting devices; harmful microbial agents and technological and sociological environments deleterious to health; environmental pollutants and contaminants of all kinds and fraudulent drugs and devices.

Activities

The Environmental Health Directorate is responsible for investigating the health effects caused by exposure to environmental factors of natural and man-made origin in the general environment as well as in the industrial and the home environments. The Directorate reviews and develops criteria on the health hazards of environmental pollutants, prepares occupational health and safety guidelines and investigates specific industrial health problems. The Directorate has been developing programs to ensure a greater degree of consumer and user protection from the hazards associated

with household products and medical devices. The Directorate contains three bureaux: Bureau of Chemical Hazards, Bureau of Medical Devices and Radiation Protection Bureau.

The Laboratory Centre for Disease Control is responsible for the provision of reference laboratory services to public health and hospital laboratories in Canada; identification of disease producing bacteria, viruses and parasites; operation of a central source of national health and disease information by the continuing assessment and investigation of the health and disease status of Canadians; assessment and improvement of the quality of laboratory diagnostic procedures used in hospitals and other diagnostic laboratories.

The Non-Medical Use of Drugs Directorate's programs are aimed at eliminating physical, mental and social health problems associated with the use of mood altering substances including alcohol and tobacco. The Directorate provides assistance to Canadians in three main areas of concern relating to problems arising from drug abuse. These areas are: prevention, treatment and rehabilitation.

The Field Operations Directorate provides the field support in education, enforcement, inspection and analysis for other Branch programs.

Bureau of Medical Devices

Tunney's Pasture Ottawa, Ontario K1A 012

Contact

Dr. A.K. Dasgupta, Director (613) 992-2479

Objectives

Responsible for programs designed to protect patients and public from potential hazards and ineffectiveness of all medical devices. Implements the provisions of the Food and Drugs Act as they relate to medical devices. The Bureau is organized into the following Divisions: Division of Medicine, Clinical Devices Division, Division of Diagnostics and Laboratory Systems and Division of Notification and Consumer Devices.

Activities

Determines what devices are sold and by whom. Ensures medical devices are safe and perform according to claims. Develops safety criteria on factors such as sterility, toxicity, biocompatability, electrical hazards, and other aspects which may cause death or injury.

Research

Research conducted to determine potential hazards and minimum performance requirements of critical devices.

Publications

Information Letters
Medical Device ALERT Letters

Radiation Protection Bureau

Brookfield Road Ottawa, Ontario K1A 1C1

Contact

Dr. A.H. Booth (613) 998-3624

Objectives

The Radiation Protection Bureau is responsible for programs designed to protect the public from health hazards associated with radiation exposure of all kinds. The Bureau has four Divisions—Radiation Medicine, X-Rays and Radiation Devices, Nuclear Safety and Radiation Dosimetry

Activities

Radiation Medicine Division

The Radiation Medicine Division is responsible for radiation protection related to the field of medicine. It advises the Atomic Energy Control Board concerning the medical use of radioisotopes, the medical aspects of overexposure cases and the medical supervision of workers in nuclear power establishments. Internal contamination in human beings is investigated and monitored via the Whole Body Counter Laboratory. The Division is also responsible for the control of radiopharmaceuticals under authority of the Food and Drugs Act and Regulations; this control is exercised through the review of drug submissions for radiopharmaceuticals and periodical inspection of manufacturers' products and facilities.

Division of X-Rays and Radiation Devices

This division is responsible for controlling adverse effects on health arising from the use of X-rays and non-ionizing radiation. Control is exercised through drafting and implementing regulations under the Radiation Emitting Devices Act: preparing safety bulletins; developing procedures for minimizing exposure; prescribing permissible levels of exposure; and developing methods for measuring and monitoring radiation. Regulations specifying design, construction and performance standards for television receivers, dental X-rays equipment and microwave ovens, are developed. Others, in draft, include diagnostic and therapeutic X-rays machines, gas discharge tubes and ultra-violet lamps. Codes of practice covering the installation and use of radiation devices are developed jointly with provincial agencies.

Nuclear Safety Division

This Division's efforts are directed towards preventing the undesirable exposure of radiation to workers using radioisotopes in research, industrial and medical applications and determining the radiation dose being received by the general public from radionuclides in the environment. As the principal health and safety advisor to the Atomic Energy Control Board, it reviews all proposed uses of radioisotopes and requires that the necessary precautions be followed. The Division also carries out surveillance of air, water and food to evaluate the levels of radioactive pollutants resulting from nuclear weapon tests and operational releases from nuclear electricity generating stations.

Radiation Dosimetry Services

The Radiation Dosimetry Services of this Bureau measures radiation exposures received by workers throughout Canada using individual dosimeters worn by the workers. The exposure data is reported to subscribers at the end of each wearing period and any excessive exposures are investigated. The data is also recorded in a "National Registry" of radiation exposures which is used to provide information on exposure trends to federal and provincial health agencies.

Research

Activities are presented in the chapter on Research.

Publications

Radiation and Man

Information Bulletins

RPB-IB-1/Radiation Sources in Industry RPB-1B-2/Guide to Initial Action in Radiation Accidents

RPB-1B-3/The Role of Federal Agencies in Radiation Accidents

RPB-1B-4/Qualification Requirements for Industrial Radiographic Personnel Using Radioisotopes

RPB-1B-5/Molybdenum-99/Technetium-99/ Generators—Some Hazards and Safety Procedures

RPB-1B-6/Detection of Leakage from Sealed Radiation Sources.

Safety Codes

RPB-SC-1/Radioisotopes in Industrial Radiography

RPB-SC-2/Radium Luminous Compounds

RPB-SC-3/Handling of Radium and Radon Sealed Sources for Medical Purposes

RPB-SC-4/X-Rays in Medical, Dental and Paramedical Diagnostic Radiology RPB-SC-7/Requirements for non-Medical X-Rays Equipment, Use and Installation

RPB-SC-12/Laboratory Facilities for Handling Radioisotopes

RPB-SC-14/Policy in Respect to the Approval of Applications for the use of Radionuclides in Humans

Training Manuals

RPB-TM-1/Radiation Hazard Control in Hospitals

RPB-TM-2/Radiation Hazard Control in Industrial Radiography

RPB-TM-3/Radiation Hazard Control in Industry

Canada Department of Labour

Occupational Safety and Health Branch Ottawa, Ontario K1A OJ3

Contact

Headquarters: J.H. Currie, Director (819) 997-3520

Regional Office: T.L. Beaton Regional Director Great Lakes Region Labour Canada 74 Victoria Street Toronto, Ontario M5C 2A7 (416) 369-4031

Objectives

To promote the establishment and maintenance of a safe and healthy working environment in federal enterprises under the jurisdiction of the Canada Labour Code Part IV and in federal departments and agencies subject to the Treasury Board Occupational Safety Policy.

Activities

The Canada Department of Labour has now re-organized and decentralized into five regions. Each regional office is responsible for compliance and delivery of occupational safety and health education programs in their respective areas. To accommodate the regions in the areas of program delivery with respect to occupational health and safety matters, the headquarters group has reorganized into four main activities, under the direction of the Branch Director as follows:

Policy and Research

Develops policies, amendments to the legislation, regulations and standards; conducts research into accident/injury causation and cost/benefit and economic and social impact; designs new Departmental initiatives and strategies in occupational safety and health; clarifies questions of jurisdiction among federal authorities and between federal and provincial jurisdictions.

Program Design

Co-ordinates national OSH projects to ensure implementation on a national basis, develops appropriate national programs; maintains programs for the processing of data, and production of work injury statistics; provides statistical information for use by Regions, Treasury Board, federal and provincial agencies: provides an educational and technical information service in support of the Government's programs in the field of occupational safety and health: provides periodical and other publications designed to promote active interest in safety and health matters; produces safety training programs for use in the field and industry; and promotes the inclusion of occupational safety and health in the curricula of higher educational institutions.

Safety Engineering Services

Reviews and develops occupational safety and health standards and technical data sheets; provides technical solutions to safety and health problems; provides a comprehensive program of hazard evaluation and control, including the operation of an industrial hygiene laboratory and technical survey training for survey personnel; provides a technical consulting and advisory service on all occupational safety and health matters; and assesses the impact on occupational health of new and existing chemicals, machines, equipment and processes.

Employment Injury Benefits

Determines coverage and eligibility with respect to the Government Employees Compensation Act and the Merchant Seamen Compensation Act and reviews and processes claims for work injuries made under these acts; investigates and settles "third party" cases; audits compensation payments; maintains claims and disbursements records.

Note: Claims processing and administration excluding adjudication of claims under the Merchant Seamen Compensation Act is being decentralized to Regional Offices.

Publications and Training Aids (English and French)

OSHB Training Aids and Manuals:
Part I/Planning for Safety
Part II/Safety Audit Guide
Part III/Accident Investigation and Reporting

Safety Perspective Securité

Audio visual material

Brochures and pamphlets

Canada Department of National Defence

Defence and Civil Institute of Environmental Medicine

1133 Sheppard Avenue West P.O. Box 2000 Downsview, Ontario M3M 3B9

Contact

Dr. R.H. Lowry, Chief, DCIEM Dr. H.D. Madill, Head, Environmental **Toxicology Section** Mr. S.E. Forshaw, P.Eng., Head, Sonics Section Capt. J.A. Winship, Life Support Section

(416) 633-4240

Objectives

The Defence and Civil Institute of Experimental Medicine (DCIEM) is one of a group of several laboratories within the Department of National Defence (DND). The prime interest of DCIEM is to provide the DND with necessary information regarding personnel and equipment to ensure the effective utilization of the human in any man-machine system in operational use by the Canadian Forces. The Institute also conducts co-operative work of a similar nature with non-military departments of the government and industry.

Activities

Environmental Toxicology Section

The Environmental Toxicology Section within the Health Sciences Division of DCIEM is actively performing applied research and service in the areas of aviation, diving and operational hygiene to further operational performance and safety. This is primarily carried out through laboratory analysis in support of aviation accident and incident investigations, compressed breathing gas toxicology related to diving, life support breathing systems, industrial air line supplied breathing air, purity testing of medical gas pipe line systems for Canadian hospitals, field evaluations of operational environments to assess their occupational safety and research in the detection of drugs and metabolic indicators of environmental stress.

Sonics Section

The Sonics Section of the Behavioural Sciences Division is involved in applied research into the effects of noise and vibration upon human operations. Areas of particular interest include impulse and steady-state noise and vibration control and analysis, hearing conservation, voice communications, environmental noise assessment, and the effects of noise and vibration upon other auditory tasks. Members of the Sonics Section have considerable experience and wide backgrounds in engineering, acoustics, psychology, and audiology.

Life Support Equipment Section

The Life Support Equipment Section within the Medical Life Support Division performs evaluation and development in the area of personal protective equipment and related items for all phases of the Canadian Forces operations, as well as consulting to other government and civilian organizations. Particular areas of expertise include head protection, protective clothing, inflatables and life preservers, survival packs and breathing systems. Equipment is evaluated whenever possible in operational settings in order to truly assess it against the operational requirements; this also serves to maintain the staff of equipment specialists current with the most recent developments in the area.

Publications

Operational Hygiene surveys at CF Bases

Toxicological Evaluations of DND equipment

Standards for compressed gases utilized in diving

Analytical Reports on breathing gas purity for operational diving and SCUBA

Analytical Reports on the purity of gases delivered by hospital pipe line systems.

Treasury Board

Occupational Health and Safety Group **Personnel Policy Branch Treasury Board Secretariat** Place Bell Canada Ottawa, Ont. K1A OR5

Contact

V.M. Clarkson, Chief (613) 992-1747

Objectives

Maintain safe and healthful working conditions in the Public Service of Canadal

Activities

Comprehensive policies governing the establishment and administration of occupational health and safety programs in Federal Government departments and agencies have been introduced by the Federal Treasury Board, as well as a broad range of supporting health and safety standards, guides and procedures.

To ensure that the safety standards are being properly applied and enforced at the many work locations, the Canada Department of Labour, under arrangements with the Treasury Board, regularly carries out safety inspections of Public Service offices and installations and specifies appropriate corrective action where the requirements of such standards are not being fully observed.

Under the Public Service Occupational Health Policy, a full range of medical services is available to employees through the facilities of the Department of National Health and Welfare. Such services include the provision of occupational and environmental health specialists both medical and para-medical, and health units. An extensive program of periodic health evaluations involving some 25,000 employees in potentially hazardous occupations has also been introduced.

Training of supervisors and managers in the responsibilities and techniques of accident prevention has received high priority and two levels of safety courses, a) basic and b) advanced, have been established.

Comprehensive systems have been established for recording and analyzing work injury and illness data in order to monitor the status of employment health and safety in the Public Service and the continuing effectiveness of the employer's policies and programs in this area.

Publications

Policies

Occupational Safety Policy Occupational Health Policy

Standards

Asbestos Exposure
Building Safety
Boilers and Pressure Vessels
Dangerous Substances
Electrical Safety
Elevating Devices
First Aid—General

—Field Operations
Hand Tools and Portable Power Tools
Hazardous Confined Spaces
Health Units and Nursing Counsellor
Services
Machine Guarding
Materials Handling
Motor Vehicle Operations
Noise Control and Hearing Conservation
Periodic Health Evaluations
Personal Protective Equipment
Pesticides
Sanitation
Temporary Work Structures

Guides

Accident Investigation Guide Alcoholism Guide Field Operations Safety Guide Laboratory Operations Safety Guide Operations Over Ice

Procedures

Environmental Health Hazard Investigations Investigation, Recording and Reporting of Work Accidents and Injuries

Ontario Ministry of Colleges and Universities

College and University Safety
Council of Ontario
9th Floor, Mowat Block, Queen's Park
Toronto, Ontario
M7A 1C1

Contact

J. Campbell, Council Chairman, Director of Safety, University of Guelph (519) 824-4120, ext. 3132

Objectives

The College and University Safety
Council of Ontario (C.U.S.C.O.) is a voluntary association of college and university personnel and representatives of
organizations whose interests and activities relate to the prevention of
accidents on Ontario campuses.
The current membership includes
faculty, administration, full-time safety
officers, and those who share safety
responsibilities along with other duties.

Activities

The functions of C.U.S.C.O. are to promote, co-ordinate, and strengthen all aspects of college and university safety. The Council endorses and supports the conduct of research and the teaching of safety knowledge and skills for the development of safe practices and attitudes. C.U.S.C.O. has produced for the membership, periodical safety newsletters, a self-starter kit for the organization of a Safety Program, and has provided other resources to further advance the knowledge and practice of accident prevention.

Industrial Training Branch
10th Floor, Mowat Block, Queen's Park
Toronto, Ontario
M7A 2B5

Contact

H.E. Lucas, Manager, Administration (416) 965-5853

Objectives

Provides compulsory trade certification in Ontario to ensure high standards of workmanship in areas where malpractice could threaten public health and safety. Compulsory certified trades include: motor-vehicle mechanic, fuel and electrical systems mechanic, transmission mechanic, alignment and brakes mechanic, auto body repairer, trucktrailer repairer, motorcycle mechanic, plumber, steamfitter, electrician, sheetmetal worker, refrigeration and air conditioning mechanic, barber and, hairdresser. The Branch also provides structured training programs to client groups.

Activities

Promotes trades training through the administration of a comprehensive apprenticeship program.

Research

Develops new concepts of training to include technological advancements.

Publications

Apprenticeship and Tradesmen's Qualification Act
General regulations
Individual trade regulations

Ontario Ministry of Consumer and Commercial Relations

Technical Standards Division 400 University Avenue Toronto, Ontario M7A 2J9

Contact

H.Y. Yoneyama, P. Eng., Executive Director (416) 965-4157

Objectives

The Technical Standards Division directs a number of activities in the development and administration of public safety legislation, namely the study of hazards and their control; publication of technical standards; review of designs and specifications; licensing equipment and plants; registration of contractors and manufacturers; certification of personnel; and field enforcement of statutes and regulations.

Activities

Operating Engineers Branch D.B. Shaw, P. Eng. (416) 965-4188

This Branch administers The Operating Engineers Act, registering boilers and compressors that constitute a power plant within the meaning of the Act. The Branch also examines and certifies hoisting engineers and refrigeration and compressor plant operators.

Pressure Vessels Branch

H.J. Wright, P. Eng. (416) 965-4121

This Branch administers The Boilers and Pressure Vessels Act, monitoring the design, fabrication, installation and maintenance of boilers, pressure vessels and their associated piping. Periodic in-service inspections are conducted, repairs monitored and accidents investigated.

Elevating Devices Branch

T.G. Smith, P. Eng. (416) 965-4150

This Branch administers The Elevators and Lifts Act and The Construction Hoists Act, through provision of engineering services such as examination and approval of drawings and specifications of all equipment prior to installation and the development and updating of safety standards; inspection of new installations and periodic inspections of

all existing elevating devices, elevators, escalators, ski tows, construction hoists; investigation of accidents, licensing and registration of all elevating devices; registration and monitoring the activities of contractors who manufacture, install and maintain elevating devices

Energy Safety Branch

H.T. Jones, P. Eng. (416) 965-7627

This Branch audits the procedures used for transmission, distribution and utilization of natural gas, propane and fuel oil; develops standards for the construction of fuel fired appliances and for their installation and use; examines and certifies individuals involved in the installation, handling and transportation of various fuels; authorizes industry personnel to carry out safety inspections on pipelines, storage facilities, transportation facilities, distribution plants, dispensing facilities and appliance installations; audits industry inspections on a random basis; licences all retail dispensing facilities, bulk storage plants, transporters, fuel oil distribution systems and propane plants; investigates all known accidents involving natural gas, propane, fuel oil and gasoline.

Building Code Branch

G. Adams, B. Arch. (416) 965-5881

This Branch provides advice and information about the Building Code and Plumbing Regulation to municipal officials, builders and contractors, architects, professional engineers and other ministries.

Upholstered and Stuffed Articles Branch

J.D. MacDougall (416) 965-2127

This Branch administers The Upholstered and Stuffed Articles Act, and concerns itself with the protection of the public from fraud and deception by controlling the standard of quality of material used as stuffing or padding in consumer goods which are made or sold in Ontario, and ensuring that reputable manufacturers and dealers are afforded protection against unfair trade practices; registers manufacturers and requires labels to be affixed to all products sold which fall within the Branch's jurisdiction.

Ontario Ministry of The Environment

135 St. Clair Avenue West Toronto, Ontario M4V 1P5

Contact

W.B. Drowley, Executive Director, Resources Division (416) 965-5115 B.M. Hines, Manager, Field Services Section (416) 965-6986

Objectives

The development of various public safety measures with reference to the Statutes and Regulations administered by the Ministry. Under the Environmental Protection Act there are provisions for the curtailment of sources of air pollution, co-ordinated through the use of an Air Pollution Index, in the interest of public safety.

Activities

The Ministry participates in the Interministerial Standing Committee on Environmental and Occupational Health and has established a comprehensive early warning and planning system called the Hazardous Substances Program. This program identifies hazards to human health and to the natural environment. Various studies related to this program are conducted in several branches of the Ministry.

A safety section of the Technical Services Branch of the Ministry presents lectures on safety to groups of plant operators as part of courses sponsored by the Ministry.

The following Acts are administered by the Ministry:

Environmental Protection Act Ontario Water Resources Act Pesticides Act

Pollution Abatement Incentive Act Environmental Assessment Act

Publications

The Ministry publishes Safety Regulations for the use of operators of water supply and water pollution control plants which are operated by the Ministry. Two manuals are available to other organizations, upon request: Safety Regulations for Water Treatment Plants

Safety Regulations for Wastewater Treatment Plants.

Water Quality Criteria and Guidelines are also available.

In addition, the Ministry publishes Air Quality Criteria and Standards. These are regulations and guidelines made under the Environmental Protection Act to protect public health and the natural environment.

Ontario Ministry of Labour

Occupational Health and Safety Division 400 University Avenue, Toronto, Ontario, M7A 1T7

Contact

Dr. C.R. May, Assistant Deputy Minister, Tel: (416) 965-9450

The Occupational Health and Safety Division (O.H.S.D.) has been established pursuant to the recommendations of the Royal Commission on the Health and Safety of Workers in Mines, by the integration into the Ministry of Labour of the Mines Engineering Branch of the Ministry of Natural Resources and the Occupational Health Protection Branch of the Ministry of Health.

The Division's mandate is the creation of a healthy and safe workplace with the co-operation of management and labour.

The primary purpose of the O.H.S.D. is to assist industry and occupational groups to identify problems, develop programs to meet the need, introduce co-operative monitoring systems and ensure compliance with acceptable standards.

It is expected that Bill 70, An Act respecting the Occupational Health and Occupational Safety of Workers, now under development, will provide a comprehensive statutory basis for this Division's programs.

The Division has six branches: Construction Health and Safety, Industrial Health and Safety, Mining Health and Safety, Occupational Health, Special Studies and Services, and Standards and Programs.

Construction Health and Safety Branch

Contact

R.K. Cleverdon, P.Eng., Director (416) 965-7161

Objectives

To encourage construction employers and employees to prevent occupational health and safety injuries, accidents, and fatalities, by identifying and controlling existing and potential health and safety hazards in the workplace.

Activities

The construction health and safety activities are primarily inspection and investigation programs to ensure compliance with the legislative framework. The Construction Safety Act, 1973 and its regulations, and The Employees' Health and Safety Act, 1976, are the major legislative frameworks which specify duties and responsibilities for occupational safety and set performance standards, by way of regulations, to be achieved in controlling specific known hazards.

The objectives are facilitated by three main types of activities:

Inspection Program

The inspection of approximately 9,000 construction sites covered by the Construction Safety Act to determine compliance with the legislation.

Investigations

All fatalities, serious accidents and unusual occurrences are investigated to assess cause, compliance with the legislation and future preventive or control measures.

Consultation Program

This initiative concentrates on specific contractors, unions or trade groups who are experiencing major problems, in an effort to initiate the participation of all concerned in the development of effective control programs for the hazard involved.

Industrial Health and Safety Branch

Contact

J. McNair, P. Eng., Director. (416) 965-4125

Objectives

To encourage industrial employers and employees to prevent occupational health and safety injuries, accidents and fatalities by identifying and controlling existing or potential health and safety hazards in the workplace.

Activities

The industrial health and safety program has a facilitating and supportive role to encourage others, (owners, employers, supervisors and individual workers), to actively assist in the creation of a safe and healthful working environment. The legislative framework is The Industrial Safety Act 1971 and The Employees' Health and Safety Act, 1976.

The Industrial program has been concerned with both safety and health aspects but the increasing use of hazardous chemicals and other agents has required an increased activity in health hazard control.

The activities carried out by this branch are:

Pre-development Review

Plans for new buildings, alterations to existing buildings and plans for industrial processes are reviewed in an ongoing effort to reduce the possibility of "building-in" occupational health and safety hazards. In addition to reviewing the specific plans, the internal responsibility system of the employer is audited to assess efforts to develop a safe and healthy workplace at the planning stages as well as at the production stage.

Cyclical Audit Program

The cyclical audit program is an ongoing program of auditing individual employer and employee compliance with the legislative framework and the status of the internal responsibility system in each plant which is responsible for identifying and controlling occupational health and safety hazards.

Investigations

Fatalities, serious accidents and unusual occurrences are investigated to assess cause, compliance with the legislation and future preventive or control measures.

Consultation

This program targets on specific employers whose records indicate potential for improvement and includes those who are experiencing major occupational health and safety problems.

Mining Health and Safety Branch

Contact

P. McCrodan, P. Eng., Director. (416) 965-1328

Objectives

The overall objective of this Branch is the encouragement of employers and employees in the mining industry to prevent accidents, injuries to health and fatalities, through the operation of the industry's internal responsibility system which should provide for:

a) the cooperative identification and control of health and safety hazards in the occupational environment, and

b) by the promotion of safe work practices.

Activities

This Branch administers Part IX of the Mining Act, and The Employees' Health and Safety Act, 1976.

Under its present statutory mandate, following the Ham Report's findings and recommendations, the branch will place increased emphasis on reinforcing, streamlining and promoting the operation of the Internal Responsibility Systems throughout the mining industry.

The activities serving the aims of the overall objective are carried out within a legislated and voluntary framework. These consist of programs concerned with providing and/or facilitating the following range of functions:

Consultation

Advice and guidance to, and consultation with, employers and employees regarding courses of action to minimize and, where feasible, to eliminate occupational health hazards and conditions as well as unsafe acts of work.

Education

Education, instruction and guidance of employees and supervising staff in safe work practices.

Inspection

Inspection and auditing of workplaces for compliance with the requirements of occupational health and safety legislation.

Auditing

Auditing the operation of Internal Responsibility Systems within mining establishments.

Investigations

Investigation of all fatalities, serious injuries and dangerous occurrences (e.g., "near misses"), in the mining environment.

Pre-development Review

Identification and control of occupational health and safety hazards at the design and planning stage of new mines, related plants, equipment and processes.

Occupational Health Branch

Contact

H.M. Nelson, P. Eng., Director (416) 965-4066

Objectives

The overall objective of the Occupational Health Branch is to protect the health and safety of workers by the active promotion of measures to minimize, and where feasible, eliminate, known or potential hazards in the occupational environment.

Activities

The activities are carried out by four specialized services:

Occupational Health Medical Services
Provides medical and nursing professional services and consultation on the
preventive and remedial aspects of occupational medicine which recognizes
all occupational health hazards due to
chemical, physical and biological
agents.

The activities include:

- a) Senior audit role in all aspects of occupational health services.
- b) Promotion and audit of medical surveillance programs of workers in establishments using lead, mercury, silica, asbestos, etc, by means of monitoring of urine and blood analysis and examination of other biological/physiological functions.
- c) Provision of emergency services in cases of accidental exposure (through spills and bursts) to toxic chemicals and noxious agents such as carbonmonoxide and coolants.
- d) Co-operation with and consultation service provided on a 24 hour basis to the Ontario Provincial Police, which coordinates remedial activities in emergency situations.
- e) Provision of toxicological information to organizations, medical practitioners, individual workers and the general public.
- f) Consultation for the Workmen's Compensation Board.
- g) Provision of assistance to education programs for occupational health and safety professionals and other concerned personnel.
- h) Provision of assistance in the preparation of Data Sheets and the development of Standards and Guidelines for in-plant occupational health and safety programs and the control of occupational hazards.

Industrial Chest Disease Service

This Service is concerned with the identification and prevention of respiratory disease resulting from occupational exposure to a variety of hazardous agents in the occupational environment. Services are provided to private industry and governmental agencies.

The activities are:

- a) Pre-employment screening to determine the individual's susceptibility to disease inherent in particular occupations and subsequent issuance of Certificates of Health.
- b) Detection and diagnosis of occupational chest disease at an early stage and subsequent recommendation for removal from exposure, for retraining or award of compensation.
- c) Assessment of the degree of functional pulmonary disability.
- d) Detection and discovery of contagious chest disease (e.g., tuberculosis) in workers, whether employed or about to enter employment.
- e) Identification of industries with known or potential risks to produce chest disease.

Supportive activities include also:

Participation in training programs of physicians specializing in occupational chest disease, training of pulmonary technicians for mining surveillance stations, and accumulation of and analysis of data and the critical evaluation of present and future diagnostic techniques.

Occupational Health Engineering Service

The objective of this Service is to protect the health of workers by the identification, assessment and subsequent recommendation and promotion of measures for the control of hazardous agents in the occupational environment.

The activities are focused on three principal areas:

a) Occupational/Industrial Hygiene
This involves field visits to industrial
plants or sites to investigate conditions
in the occupational environment with a
view to identifying actual or potential
hazards to the health and safety of
workers.

b) Air-quality Assessment This involves the measurement of airborne elements and noxious contaminants taken at the workplace.

c) Audit of Monitoring Programs
This is a new service area. Programs will
be promoted and set-up in individual establishments to provide for the monitoring of environmental and occupational
conditions at the workplace.

This Service is also involved in health and safety training programs and provides input to the preparation of Data Sheets.

Occupational Health Laboratory Service

Laboratory services are provided in the performance of chemical analyses of biological (blood and urine), air and solid samples. The samples are submitted to the laboratory by government agencies and individual industrial establishments.

Publications

Occupational Health in Ontario

—a quarterly editing and publication of papers prepared by staff members and other professionals; data-sheets and notes on coming events.

Special Studies and Services Branch

Contact

Dr. M. Fitch, Director (416) 965-2493

Objectives

The Branch objectives are:

- a) to gather, develop and generate information on occupational and environmental factors resulting from industrial activity which may pose immediate or potential hazards to the health and safety of workers and the general community;
- b) to provide consultation and support services to other agencies and organizations concerned with the minimizing, control and elimination of hazards, such as radiation and others, to the health and safety of workers and the general community.

Activities

Three services are provided by this branch.

Radiation Protection Service

The Health Physics Service delivers radiation protection services to the public by identification of new hazards; advising on control measures; development of methods of measuring the hazard; conducting tests or measurements in known or suspected hazardous situations in the occupational environment or resulting from industrial activity. The services are provided to other branches of the Occupational Health and Safety Division, and are interrelated with more general assessment and control programs of the Ministry of the Environment and with programs of the federal government.

The activities are focused on principal problem areas, as follows:

- a) Radiation in the mining environment.
- b) Radiation from commercial and industrial microwave ovens and other radiation-emitting instrumentation, such as X-ray, laser equipment, ultra-violet, infra-red, etc., and development of Standards and Guidelines.
- c) Provision of consultative service to other agencies and ministries.
- d) Radiation Emergency Contingency Plans, such as:

technical supervision of radiation emergency procedures in contingency plans for nuclear power station accidents, preparation and editing appropriate procedural manuals, and others.

Radiation Protection Laboratory

This is the only laboratory in Ontario which provides radio-analytical services to the various provincial agencies and services charged with the responsibility of administering programs associated with the surveillance of uranium mining; milling and processing plants; nuclear reactors; industries and other facilities which use radio-active isotopes.

The laboratory receives for measurement and analysis, a variety of chemical, biological and materials samples, ranging from water and air, urine, swipes, milk and other biological matter (biota), sediments, soil, dust and air filters.

These samples are measured for radioisotopes of the U-238, U-235 and Th-232 series present in nature and radiation from fission and activation products of nuclear reactors.

Health and Safety Studies Service

The Health and Safety Studies Service provides information and consultation on the possible long term health effects of various agents associated with, used in and resulting from industrial processes.

Studies are carried out to quantify the possible long-term effects of industrial pollutants, and the accumulated and generated information is presented in the recommendations for appropriate guidelines and standards and consultative services.

The activities of this Service are conducted in the framework of special study projects such as—mortality of employees in INCO Copper Cliff Refinery; mortality of employees in vinyl chloride production; causes of death in Ontario uranium miners; sputum cytology programs in Sudbury and Elliot Lake; and others.

In addition to the systematic studies carried out by this group, the individual members of the Service prepare ambient air criteria, (i.e., acceptable levels of air pollutants), from the point of view of health, advice on health hazards of pollutants in water, fish, etc., as required. For this purpose, members of the staff maintain an appropriate degree of preparedness in many fields. Members of the Service, in addition, carry out short term studies and investigate activities in varying depth as issues arise. (T.T.C. study, exposure to radon daughters, etc.)

Among other ongoing consultative activities, the Chief of this Service is acting as Health Advisor to the Atomic Energy Control Board.

Standards and Programs Branch

Contact

R.J. Ogilvie, Director. (416) 965-8710

Objectives

The objectives of this Branch are the coordination of programs, criteria and standards setting, evaluation systems, information and advisory services, training and education. The Branch will also be responsible for the development of data acquisition and processing systems in support of the programs of the other Branches of the division

Activities

These are grouped in four areas.

Program Analysis and Evaluation

Co-ordination of the development of short and long range objectives, goals, plans, priorities with regard to occupational health and safety in Ontario and the development and operation of information systems necessary to support the planning, operation and evaluation of division programs.

Hazard Identification and Programming

To co-ordinate the development and analysis of specific occupational health and safety hazards in Ontario and the conversion of such analysis into action plans to be implemented by field staff in reducing the presence or impact of such hazards. These plans can vary from new legislative standards, to data sheets and guidelines, to voluntary control programs.

Industry Sector Programming

To support the operating line programs (Industrial, Construction, Mining) in the development of sector plans, operating policies and procedures of the field staff, the development and implementation of in-house training programs.

Advisory Service

On Occupational Health and Safety

To co-ordinate with division programs and external clients the development and distribution of information on occupational health and safety injuries and accidents, guidelines and data sheets, etc. and provide policy and administrative support to the Lottery Funds committees.

Publications

A Directory of Occupational Health and Safety in Ontario, a periodical which provides information on occupational health and safety programs and services in the province, carried out by government, safety organizations, laboratory services and others.

Legislative Standards, Data Sheets and Guidelines on construction industrial, mining health and radiation available upon request from this branch or the respective branches.

Advisory Committee to the Ministry of Labour Provincial Lottery Awards

Lottery Funding Advisory Committee

Members

Deputy Minister of Labour T.E. Armstrong, Chairman (416) 965-4115

Assistant Deputy Minister, Occupational Health and Safety Branch Dr. C.R. May

Director, Standards and Programs Branch R.J. Ogilvie

Chairman, Applied Research Committee Dr. E. Mastromatteo

Chairman, Manpower Training and Development Committee

Prof. P.J. Foley

Management Rep., Advisory Council (to be appointed)

Labour Rep., Advisory Council (to be appointed)

Observers

Deputy Minister of Health W.A. Backley

Deputy Minister of Environment *M. Sharp*

Deputy Minister of Colleges and Universities

J.G. Parr

Deputy Provincial Secretary, Resources Development

R.M. Dillon
Director, Research Branch, Ministry of

Labour
G. Swartz

Executive Director, Administration Services, Ministry of Labour D.J. Morgan

Objectives

To foster and support manpower training and development of occupational health and safety specialists and support the conduct of research projects addressed to the solution of specific practical problems on occupational health and occupational safety areas of interest to the province.

To accomplish this, the Ministry has established an Advisory Committee which will recommend to the Minister the allocation of funds into two broad program areas

1.Manpower training and development 2.Applied Research.

Activities

Review of key issues, identifying and establishing priority areas. Two separate awards committees have been established:

Manpower Training and Development Awards Committee:

This Committee will establish review procedures and general ground rules, review all applications for grants for manpower training and development, and submit its recommendations to the Advisory Committee on those applications it considers worthy of an award, in order of merit.

Applied Research Awards Committee:

The above Committee will establish review procedures and rules, will review applications for applied research grants and submit recommendations to the Advisory Committee.

Manpower Training and Development Awards Committee

University of Toronto Prof. P. Foley, (Chairman)

McMaster University Dr. C.F. Muir

Medical Director, Occidental Life Insurance Co.

Dr. Douglas Warren, (Management Representative)

Humber College Safety Technology Program

Donald R. Stemp, (Community College Representative)

Ontario Federation of Labour G. Murtagh (to be confirmed) (Labour Representative)

University of Waterloo Dr. T.M. Fraser

Ontario Hydro
H. Seymour

Applied Research Awards Committee

Inco Metals Ltd.

Dr. E. Mastromatteo, (Chairman)

University of Toronto
Dr. G.J. Stopps, (University Representative)

Dow Chemical of Canada Neil Murray, (Management Representative)

Ontario Federations of Labour E.A. Waddell (Labour Representative)

Advisory Council on Occupational Health and Occupational Safety

Contact

Dr. J.F. Mustard, Chairman c/o McMaster University Hamilton, Ont. (416) 525-9140

Objectives

The Advisory Council makes recommendations to the Minister of Labour on occupational health and safety programs and advises the Minister on matters relating to occupational health and safety that are brought to the Council's attention or referred to it. The Council performs the functions previously carried out by the Labour Safety Council and the Advisory Council on Occupational and Environmental Health.

Membership

In addition to the Chairman, the Council consists of a Vice-Chairman and 18 members, six representing labour, six representing management and six representing the general public.

The bulk of the work of the Council is carried out by a number of special committees whose members represent labour, management and the general public. Each committee is chaired by a member of the Council.

Chairman

Dr. J.F. Mustard Vice-Chairman (to be appointed)

Labour

United Steelworkers Lorne Heard

Provincial Bldg. & Construction Trades Council Henry Kobryn

Oil, Chemical & Atomic Workers John More

President, O.F.L. Clifford Pilkey

United Auto Workers Larry Sheffe

O.F.L. Ed Waddell

Management

General Motors of Canada W.A. Barnes

Reed Ltd. T.S. Jones

INCO

Dr. E. Mastromatteo

Noranda Mines Peter Riggin

Esso Chemical Canada Don Stover

Ontario Hydro

Public At Large

Steel Company of Canada Limited Dr. J.W. Charters

Queen's University Dr. R. Fraser

Private Consultant Gil Samson

University of Toronto Dr. J. Stopps

To be appointed (Two Vacancies)

Ministry of the Solicitor General

Office of the Fire Marshal 590 Keele Street Toronto, Ontario M6N 4X2

Contact

B.S. Young, Public Relations Supervisor (416) 965-4871

Objectives

The fire marshal derives his legislative authority from The Fire Marshals Act passed by the Ontario Legislature in 1914. He is responsible for directing, coordinating and advising on all aspects of fire prevention, fire fighting and fire investigation in Ontario.

Activities

The Ontario Fire College operates as a section of the Office of the Fire Marshal, conducts three 15-week courses of advanced training in fire prevention, fire protection and fire department management for municipal fire officers and potential fire officers.

The staff of the Office of the Fire Marshal advises municipal councils, fire departments, and government departments in fire prevention and fire protection problems; preparation of municipal and provincial fire safety laws, and examines the plans of all schools, universities, hospitals, hotels, welfare and government buildings for a fire safety design standard. Under the provisions of the Fire Marshals Act, all municipal fire chiefs and fire prevention officers are Assistants to the Fire Marshal and may inspect all buildings within their jurisdiction and where hazards of fire are disclosed, may order remedial measures.

The Office of the Fire Marshal directly administers 11 Acts. In addition, many provincial acts and regulations include fire safety requirements which are enforced by the ministries administering those acts and regulations, e.g., The Industrial Safety Act and The Construction Safety Act. Each contains important fire safety provisions designed to protect employees and other persons having access to the premises.

The Office of the Fire Marshal also provides the following service to municipal councils: fire prevention and training programs; fire loss statistics; municipal fire protection surveys; examinations for promotions; specifications for apparatus and equipment; advanced training of fire department officers; training of fire fighters; training films & publications.

Atomic Energy of Canada Limited

275 Slater Street Ottawa, Ontario K1A 0S4

Contact

A.R. Burge, Director, Public Affairs (613) 237-3270

Objectives

Atomic Energy of Canada Limited is a Crown corporation. Functions include nuclear research; the development, design and marketing of nuclear energy systems and the production and sale of radio-active isotopes and associated equipment for use in medicine and industry. The safety objectives related to these undertakings include radiation protection to the public, the plant and equipment operators and the researchers.

Activities

The corporation provides training courses in Radiation Protection and Health Physics to its employees who work directly with radioactive materials or activity generators.

Publications

Decontamination principles and techniques./J.M. White/AECL 1427

The potential radiation hazard associated with the operation of nuclear reactors in the future/C.G. Stewart/AECL 1584

Maximum permissible concentrations of radioactive nuclides in airborne effluents from nuclear reactors/P.J. Barry/AECL 1624

Tritium hazards associated with a heavy water moderated reactor/W.T. Morecraft/AECL 1697

Assessment of the radiation dose to Canadians from fallout/W.E. Grummitt, J.E Guthrie/AECL 1873

The hazards of inhaling radon-222 and its short-lived daughters: consideration of proposed maximum permissible concentrations in air/C.G. Stewart, S.D. Simpson/AECL 1979

A supplied air hood for protection against very toxic air contaminants/J.M. White, R.J. Beal, W.J. Courneya/AECL 3057

The Chalk River Nuclear Laboratories respirator program/J.M. White, K.W. Merrett/AECL 3209

The Chalk River Nuclear Laboratories protective clothing program/J.M. White/AECL 3475

Health physics instrumentation/G.
Cowper, W.G. Cross, H. Ing, A.R. Jones,
R.M. Holford, R.V. Osborne/AECL 3864
Evaluation of human radiation exposure/
R.F. Foster, I.L. Ophel, A. Preston/AECL

Permissible levels of tritium in man and the environment/R.V. Osborne/AECL 4113

Assessing and controlling the hazard from tritiated water/W.R. Bush/AECL 4150

An evaluation of some respirator glasses/J.M. White, K.W. Merrett/AECL 4203

One-day introduction to radiation protection principles/J.H. Fenn, J.M. White, L.C. Watson/AECL 4591

Recommended protective clothing practice to minimize radiation exposure/G.C. Legg/AECL 4611

Internal radioactive contamination in selected groups of CRNL employees/ D.W.S. Evans/AECL 5255

Radiation exposure in the laboratory/J.L. Weeks/AECL 5294

Plan for a continuing follow-up of persons exposed to radiation in the Canadian nuclear power industry/H.B.
Newcombe/AECL 5538

Atomic Energy Control Board

270 Albert Street P.O. Box 1046 Ottawa, Ontario K1P 5S9

Contact

R.W. Blackburn, Secretary (613) 992-9206

The Atomic Energy Control Act provides for a five-member board; one member being the President of the National Research Council and four other members, including a president. The membership of the Board as of October, 1976 is as follows:

Dr. A.T. Prince President, Atomic Energy Control Board Ottawa, Ontario

Dr. W.G. Schneider President, National Research Council Ottawa, Ontario

Professor L. Amyot Director, Institute of Nuclear Energy Ecole Polytechnique Montreal, Quebec

Miss S.O. Fedoruk Professor of Therapeutic Radiology, University of Saskatchewan and Director of Physics, Saskatchewan Cancer Commission Saskatoon, Saskatchewan

Mr. J.L. Olsen President and Chief Executive Officer Phillips Cables Limited Brockville, Ontario

The Board is supported by a staff of about 90 located in Ottawa, and meets at least three times each year.

Objectives

Regulatory control of the health, safety and security aspects of prescribed substances* and nuclear facilities**.

• Provision of technical advice on, and administration of certain aspects of Canadian policy and international commit-

ments on the safeguarding for peaceful

purposes of certain prescribed substances and nuclear equipment.

 Provision of advice on policy development and administration of certain aspects of Canadian policy on uranium resource management.

 Security classification and protection of certain atomic energy information.

 Administration of contracted missionoriented research in the field of nuclear safety.

*"prescribed substances" are defined in the Atomic Energy Control Act as meaning "uranium, thorium, plutonium, neptunium, deuterium, their respective derivatives and compounds and any other substances that the Board may by regulation designate as being capable of releasing atomic energy." This definition is further expanded in the Energy Control Regulations where it is indicated that "radioactive isotopes are designated as being capable of releasing atomic energy, or as being requisite for the production, use or application of atomic energy."

**"nuclear facilities" are defined in the Atomic Energy Control Regulations to mean "a nuclear reactor, a sub-critical nuclear reactor, a particle accelerator, a plant for the separation, processing, reprocessing or fabrication of fissionable substances, a plant for the production of deuterium or deuterium compounds, a facility for the disposal of prescribed substances and includes all land, buildings, and equipment that are connected or associated with such reactor, accelerator, plant or facility."

Activities

A major function of the Board is the control of prescribed substances and nuclear facilities in the interest of health, safety and security. This is achieved through a comprehensive licensing system which involves submission of application, evaluation of information, issuance of licence, and compliance inspection.

Applications for licensing must provide comprehensive information on the nature and quantity of the prescribed substances and the purpose for which they are required, description of premises and equipment in which such substances are to be used; measures to prevent theft, loss or unauthorized use; radiation protection procedures under

normal and accident conditions: disposal methods: qualifications, training and experience of users; and any other information deemed to be necessary. A licence issued by the Board may include conditions relating to any of the foregoing or which the Board deems necessary in the interest of health, safety and security, including radiation dose monitoring requirements, instructions and procedures relating to the control and limitation of exposure to ionizing radiation and maximum quantities of radioactive or other hazardous materials that may be discharged into the environment.

Applications for the operation of a nuclear facility must include information on the operating procedure of the facility: radiation protection measures under normal operating and accident conditions; measures to prevent theft, loss or unauthorized use of prescribed substances used in the facility; qualifications, training and experience of the facility operators; arrangement to compensate for injuries or damages resulting from the operation of the facility; and any other information required to evaluate the application. The licence issued by the Board may include conditions to ensure the health and safety of facility personnel and the public and the security of the facility and of prescribed substances used.

The licensing of major nuclear facilities is carried out in three stages: site approval, construction licencing, and operation licensing. Site approval involves consideration of a number of environmental and land-use aspects, and allows time for informing the public and obtaining its views on the proposed siting and its possible impacts. In the case of nuclear reactors, operators and supervisors must be authorized to operate through examination by the Board, following training given by the utility operating the reactor.

The evaluation of applications for various types of licences, and also the assessment of compliance with licence conditions are major functions of the Board and its staff. To assist in these functions, the Board appoints both standing and ad hoc advisory commit-

Reactor Facility Name	Туре	Licensee	Status/Licensing Action/Remarks
Power Reactors			
NPD Generating Station Rolphton	20 MW(e) (1) CANDU-PHW (2)	Ontario Hydro & AECL (3)	Started up 1962. Operating Licence No. 4/72, expires 31 May 1977
Douglas Point Generating Station, Tiverton	200 MW(e) CANDU-PHW	Ontario Hydro & AECL	Started up 1966. Operating Licence No. 5/73, expires 30 June 1977
Pickering Generating Station "A", Pickering	4 x 500 MW (e) CANDU-PHW	Ontario Hydro	Started up 1971. Operating Licence No. 2/74, expires 30 June 1977
Bruce Generating Station "A", Tiverton	4 x 750 MW(e) CANDU-PHW Process steam	Ontario Hydro	Construction Licence No. 1/71 in force. Operating Licence 4/76 for 10% Power o first unit. A second unit perhaps by end of 1976.
Pickering Generating Station "B", Pickering	4 x 500 MW(e) CANDU-PHW	Ontario Hydro	Construction Licence No. 2/74 in force. Start-up 1981
Bruce Generating Station "B", Tiverton	4 x 750 MW(e) CANDU-PHW	Ontario Hydro	Construction Licence No. 2/75 issued. Start-up 1983
Darlington Generating Station "A"	4 x 850 MW(e) CANDU-PHW	Ontario Hydro	Application for site Approval under consideration. Start-up 1986.

tees composed of technical experts from appropriate disciplines, government agencies and universities, with emphasis on safety, health and environment.

(2)PHW—"Pressurized Heavy Water"
(3)AECL—"Atomic Energy of Canada Limited"

The Board is empowered to appoint inspectors, medical advisers and radiation safety advisers to enforce the requirements of the Atomic Energy Control Regulations. Such appointments are made from appropriate federal and provincial government departments as well as from the staff of the Board. Inspectors are authorized to inspect premises and records relating to the health, safety and security aspects of prescribed substances and nuclear facilities. Medical advisers are authorized to make investigations and recommendations relating to examination, employment and treatment of atomic radiation workers and other persons who may be occupationally exposed to ionizing radiation. Radiation safety advisers may be individual officers or committees appointed for the purposes of reviewing applications for licences, making appropriate recommendations and reviewing reports of unusual occurrences.

Licences are normally issued for a fixed term and are renewable on application and on demonstration of satisfactory compliance with their terms and conditions. Licences may be cancelled or revoked at any time because of noncompliance, or in order to amend them.

For information on the status of reactor facility and heavy water licensing in Ontario see the following tables.

Other functions of the Board include radioactive waste management, transportation of radioactive materials, and, in co-operation with Emergency Planning Canada, the preparation of a revised guide for coping with releases of radioactivity from nuclear facilities.

The Board also engages in international activities through active participation in international organizations.

Research

See Appendix under Federally Supported Research

Publications

Annual Report

Submissions to the Ontario Royal Commission on the Health and Safety of Workers in Mines (1975)

Technical papers on licensing and safety requirements.

Status of Reacto	r Facility Licensing	as of 31 March 1976
Status of nearty	I acility Licensing	

Reactor Facility Name	Type	Licensee	Status/Licensing Action/Remarks	
Point Lepreau Generating Station (New Brunswick)	600 MW(e) CANDU-PHW	New Brunswick Electric Power Commission	Construction Licence No. 1/75 issued. Start-up 1980	
Research Reactors				
McMaster University Nuclear Reactor	5 MW(t) Swimming Pool	McMaster University	Started up 1959. Operating Licence No. 4/73, expires 30 June 1978	
University of Toronto Subcritical Assembly	embly Assembly Toronto 20 kw(t) (1) University	University of Toronto	Started up 1958. Operating Licence No. 6/74, expires 30 June 1979 Operating licences for SLOWPOKE revoked. SLOWPOKE II started up 1976. Operating Licence No. 1/76, expires 30 June, 1977	
University of Toronto Nuclear Reactor		University of Toronto		
Ecole Polytechnique Subcritical Assembly	Subcritical Assembly	Ecole Poly- technique	Started up 1974. Operating Licence No. 1/74, expires 24 March 1979	
Ecole Polytechnique Nuclear Reactor	20 kw(t) SLOWPOKE	Ecole Poly- technique	Construction Licence No. 3/75 issued. Start-up 1976	
Dalhousie University Nuclear Reactor	20 kw(t) SLOWPOKE	Dalhousie University	Construction Licence No. 2/76 issued. Start-up 1976	

⁽¹⁾⁽t) "thermal";(e) "electrical" power (nominal net) (2)PHW—"Pressurized Heavy Water" (3)AECL—"Atomic Energy of Canada Limited" (4)BLW—"Boiling Light Water"

Facility Name	Capacity (Tons/Year)	Licensee	Status/Licensing Action/Remarks
Glace Bay, N.S.	400	AECL	Reconstruction completed December 1975. Leased by AECL from Deuterium of Canada Limited. Limited operating licence No. 1/75 issued April 1975. Full operating licence No. 2/75 issued in July 1975. expires 30 June 1976.
Point Tupper, N.S.	400	AECL	Purchased by AECL from Canadian General Electric Co. Ltd. Previous oper- ating licence No. 2/74 replaced by new operating licence No. 3/75 expiring 30 June 1976.
Bruce "A"	800	Ontario Hydro	Operating licence No. 1/74 expired 30 June 1975. New operating licence issued No. 4/75 expiring 30 June 1976.
"B"	800	Ontario Hydro	Construction Approval No. 1/75 in force. Construction continuing.
"C"	800	Ontario Hydro	Construction Approval No. 1/75 issued. Construction cancelled early in 1976.
"D"	800	Ontario Hydro	Construction Approval No. 1/75 in force. Construction continuing but completion date delayed.
La Prade	800	AECL	Approval of construction recommended but withheld pending resolution of environmental protection issues.

Canadian Centre For Occupational Safety and Health

Occupational Safety and Health Labour Canada Ottawa, Ontario K1A 0J2

Contact

J.H. Currie, Director (613) 997-3520

In the Speech from the Throne on October 12, 1976 the federal government announced its intention to establish the Canadian Centre for Occupational Safety and Health. The Centre will report to the Federal Cabinet through the Hon. J. Munro, Minister of Labour. It will have an initial budget of \$8 million and a proposed staff of 80-100.

Objectives

To promote and create a better quality of life in the workplace in both the private and public sectors and to improve the quality of industrial relations.

Proposed Activities

Provide a forum to achieve consensus among participants for eventual promulgation of consistent standards and codes for occupational safety and health. Serve as a centre for collecting. processing and disseminating scientific and technical information in the field of occupational safety and health. Stimulate and orient research needs. Develop consensus in occupational hazards. Review and disseminate documents and model codes on hazard criteria. Participate in or operate prototype testing of industrial processes for the purpose of identifying potential hazards and establish mechanisms to prevent or eliminate these hazards. Advise and provide its services to workers, trade unions, management, government agencies and the general public seeking solutions to existing and anticipated problems in this field. Undertake pertinent studies and surveys and through grants, support and co-ordinate these activities at industrial and institutional levels. Maintain communication with other national and international organizations and institutions engaged in the advancement of occupational safety and health standards and systems.

Canadian Government Specifications Board

Supply and Services Canada Ottawa, Ontario K1A 0S5

Contact

Dr. F.S. Eadie, Secretary (613) 992-1970

Objectives

To serve as the central voluntary standards-writing agency of the federal government. The Board is accredited by the Standards Council of Canada as one of the elements in the National Standards System involved in the development of National Standards of Canada.

Activities

CGSB develops and maintains standards on behalf of the public and private sectors in a wide range of subject areas. This is accomplished through standards committees representative of all relevant interests including consumers, producers, government, and technical, professional and trade societies. Standardization programs related to occupational health and safety activities include flammability of textiles; personal flotation devices and the manufacture, control and distribution of drugs, foods, x-ray films and survival equipment.

Publications

CGSB publications include about 1800 standards, an annual Catalogue of Standards, a Quarterly Journal and Metrinote, a quarterly publication giving information on metric conversion of CGSB standards.

National Research Council

Public Information Branch Montreal Road Ottawa, Ontario K1A OR6

Contact

Mr. L. Racine, Public Information Advisor Ms. J. Rickerd, Executive Editor (613) 993-3106

Objectives and Activities

NRC promotes, conducts and provides funds for basic and applied research in Canada.

Publications

National Building Code of Canada 1975 Softcover edition Order No. NRCC 13982/\$6.50 Supplement No. 1, Climatic Information for Building Design in Canada 1975 Order No. NRCC 13986/\$1.00 Supplement No. 2, Fire Performance Ratings 1975 Order No. NRCC 13987/\$1.00 Supplement No. 3. Commentary on Part 3. Use and Occupancy 1975 Supplement No. 4, Commentaries on Part 4 of the NBC of Canada 1975 (including requirements for Design of Plain and Reinforced Masonry) Order No. NRCC 13989/\$2.50 Supplement No. 5, Building Standards for the Handicapped 1975 Order No. NRCC 13990/\$1.00 Measures for Fire Safety In High Build-Order No. NRCC 13366/\$1.00 Canadian Heating, Ventilating and Air-Conditioning Code 1975 Order No. NRCC 13984/\$1.25 Canadian Plumbing Code 1975 Order No. NRCC 13983/\$2.00 Canadian Construction Safety Code Order No. NRCC 13985/\$1.50

Order No. NRCC 13991/No Charge Canadian Farm Building Code 1975 Order No. NRCC 13992/\$5.50 List of Standards Referenced in the NBC 1975 and its Associated Codes Order No. NRCC 14304/No Charge Span Tables for Wood Joists, Rafters, Trusses and Beams Order No. NRCC 14396/\$1.00 National Fire Code of Canada, 1963 Order No. NRC 7550/\$1.50 Municipal Fire Department Code, 1961 Order No. NRC 6479/\$.25 Municipal Volunteer Fire Department Code, 1962

Residential Standards 1975

For NRC sponsored research related to Occupational Health and Safety in Ontario, see section on research, Federally Supported Research in Ontario Universities

Order No. NRC 7201/\$.25

Ontario Hydro

700 University Avenue Toronto, Ontario M5G 1X6

Contact

J.H. Seymour, Manager, Safety Department B.G. Gallagher, Safety Co-ordinator (416) 592-2487

Objectives

Ontario Hydro has more than 23,000 employees located in communities and construction sites throughout a 250,000 square mile operational area. Safety programs are directed to employees, their families, and the general public.

Activities

The Health and Safety Division establishes policies, standards, regulations and criteria in accordance with radiation regulatory requirements and compatible with federal and provincial health and safety legislative acts and regulations. The Division develops, co-ordinates and monitors various health and safety programs used throughout Ontario Hydro. Specialized services are provided to ensure the maximum possible health and safety of employees and the public through the activities of the Division's three Departments: Health Services, Health Physics, and Safety. These services encompass a wide range of industrial medicine and nursing; a comprehensive radiation protection training as well as specialist health physics services including internal and external dosimetry, environmental monitoring, etc.; and many specialized conventional occupational health and safety services, including industrial hygiene, safety engineering, fire prevention and protection, driver training, etc.

The Corporate Services Division produces a number of pamphlets and booklets dealing with various general aspects of public safety on behalf of the Safety Department.

The Electrical Inspection Department is concerned with public safety through enforcement of the Electrical Safety Code.

Publications

Electrical Safety Code Book

Manuals Developed for Internal Use
(Limited quantities available upon request):

Instruction for Artificial Respiration
Explosive Power Activated Tools
Handling and Storage of Explosives
Reporting and Investigating Accidents
and Work Injuries

Safe Driving Manual, Vehicle Maintenance and Operation

Safety Rules for Waterways Operation Craning Handbook

Rigging Handbook

Safety Rules

Work Protection Code

Radiation Protection Regulations Part 1—Nuclear Electric Generating Stations Radiation Protection Regulations Part 2—Industrial Radiography

Brochures on electrical safety, electric wiring, radiation.

Audio-Visual Material

Ontario Hydro has several films on industrial and home safety

Workmen's Compensation Board

2 Bloor Street East 20th Floor Toronto, Ontario M4W 3C3

Contact

E. T. Weaver, Executive Director, Communications (416) 965-7822

Objectives

A complete reorganization of the Board's staff into six operating Divisions took place during 1974. These Divisions with their objectives are:

Claims Services Division—Adjudication and processing of all claims, including medical aid, compensation and pensions; and claims counselling and information services.

Rehabilitation Services Division— Supervision and provision of medical care and rehabilitation to injured workers, provided by medical advisers, specialists and consultants at Head Office; the Vocational Rehabilitation Branch; and the Board's Hospital and Rehabilitation Centre at Downsview, Ontario.

Financial and Legal Services Division—Accounting, revenue, assessment, collection, audit, and similar functions; and legal services.

Human Resources Division—Organization planning and development, staff relations, staffing, salary administration, and related functions.

System development and data processing, records management, office services, statistical services, and similar support functions.,

Communications Division—External and internal communications programs, media relations, other public relations functions; and the Council of Safety Associations, which co-ordinates the activities of the nine safety associations financed by the Board.

The Board's appeals process comes under the jurisdiction of the Vice-Chairman of Appeals.

Activities

Claims Services Division

Three Branches have been established on the basis of major divisional functions: Claims Adjudication, Claims Information and Counselling, and Claims Review.

Claims Adjudication

It is the Board's responsibility to ensure that all provisions of the Act are met. At the same time, it is the Board's function to respond as quickly as possible to the urgent needs of the injured worker.

Claims Information and Counselling Branch

This Branch provides claims information and counselling services in the two Metropolitan Toronto and eight area offices throughout the province. Also introduced in 1974 was a system of "Visiting Counsellors". Area Offices which serve a large area instituted a system whereby claims counsellors visit other cities on a regular basis. Other activities are counselling, interpreting and telephone inquiry by staff by head office.

Claims Review Branch

Personnel of the Claims Review Branch are senior adjudicators. In addition to examining all adverse decisions, they are responsible for conducting major studies related to claims adjudication performance and assisting in the determination of claims policies.

Rehabilitation Services

Medical Branch

The Board's medical personnel are organized in two groups: the treatment staff at the Downsview Hospital and Rehabilitation Centre, where there were 16 clinical physicians as of December 31, 1974; and the Medical Branch at the Board's head office, where, in 1974, 25 doctors were serving as medical specialists, consultants and advisers.

The function of the Medical Branch is to advise on adjudication, to maintain a cohesive and co-ordinated policy for treatment of injured workers, and to assure that excellent medical facilities and effective treatment programs are provided. In support of these aims, the Board underwrites and/or co-operates with other sponsors in support of a number of educational and research activities. See Section 8 "Research Projects."

Annual activities sponsored by the Board are:

A one-day Seminar on Hand Injuries (co-sponsored with University of Western Ontario).

A three-day annual Fracture and Trauma Course, presenting in 1975 "Trauma to the Upper Limb", (cosponsored with University of Toronto).

Special clinics at the Centre are: the General Trauma Clinic, the Amputee Clinic, the Neurology Clinic, the Back Rehabilitation Clinic, and the Hand Clinic.

During 1975, "Evaluation Module" was established comprising a general physician, a registered nurse, an occupational therapist, a remedial gymnast, a psychiatrist, a psychologist, a vocational rehabilitation counsellor and a claims specialist. This concentration of expertise focussed on an individual patient's problems can significantly assist in preventing psychological disabilities, which often accompany physical injuries from developing into chronic and intransigent psychoneurosis.

Medical Aid Services

Medical Aid Services and Medical Aid Consultants monitor and pay for all treatment services provided under the Act for injured employees throughout the Province. Medical Aid Services also supply and repair back braces, artificial limbs and special orthopaedic boots, and supply medication.

A specialist travels throughout the Province to redesign handicap aids and solve problems for totally disabled workers and their families. Also, a specialist in spinal cord injuries commits an increasing amount of time to his function as Board consultant for such cases.

Vocational Rehabilitation

The Vocational Rehabilitation Branch has the responsibility of assisting injured employees to re-establish themselves in employment. Primarily, this function is done by the Branch's Vocational Counsellors, who must establish close relationships with injured workers, and liaise effectively with a wide range of social and government agencies as well as with employer and union representatives.

Activities of the Vocational Rehabilitation Branch include:

Interviews at the Board's head office

Interviews at the Board's Hospital and Rehabilitation Centre

Requests for commutation of pensions

Referrals for additional special services

Placing workers on training programs

Training prior to job placement or awaiting placement

Predominant training is in: education upgrading, training on-the-job, technical courses, post-secondary education, and business courses. The major types of training continue to be academic education, welding, mechanics, small appliance service, cabinet making, jewelry, arts, clerical and sales, industrial sewing, and upholstery.

Human Resources Division

The Board's Human Resources Division has staff responsibility for all personnel functions, and organization planning and development. Included in the personnel functions are benefits and salary administration, recruitment, and staff relations. Within organization planning and development are staff training and education, organization analysis, and staff planning and development.

Staff

At December 31, 1975 the total staff of the Board and the Safety Associations was 2,125, compared with 1,904 on the same date the previous year.

Staff distribution in 1975 was: Head Office—1,320, Hospital and Rehabilitation Centre—314, Safety Associations—310, and Area Offices—181.

Administrative Resources Division

The Administrative Resources Division provides basic support services for the Workmen's Compensation Board in such areas as systems development and data processing records management, office services, statistical services and maintenance for the physical plant and grounds of the Hospital and Rehabilitation Centre.

The systems development program is a major undertaking, aimed at instituting a more responsive and effective total in-

Accident Prevention Expense by Safety Association Year Ended December 31.1975

	(thousands 1975	of dollars)
Construction Safety Association of Ontario	\$3,984	\$2,660
Electrical Utilities Safety Association of Ontario	445	340
Forest Products Accident Prevention Association	579	378
Farm Safety Association, Inc.	282	233
Hospital Accident Prevention	190	184
Industrial Accident Prevention Association	3,210	2,685
Mines Accident Prevention Association of Ontario	521	352
The Ontario Pulp and Paper Makers Safety Association	163	133
Transportation Safety Association of Ontario	603	513
	\$9,977	\$7,478
Board's safety expense		715
	\$9,977	\$8,193

The activities of each organization are reviewed separately in the Safety Associations Section.

formation system for the Board. From planning stage through to design specification and implementation, this project is expected to take approximately four years to complete.

Major benefits of a flexible, on-line integrated system will include:

- 1.Improvement of the Board's claims processing and payment systems.
- Upgrading of responsiveness to the information needs of both inside and outside users.

Communications Division

Safety Associations

Nine Ontario Safety Associations, operating under the terms of the Workmen's Compensation Act, make available comprehensive safety education programs. They are, with only minor exceptions, funded by the Workmen's Compensation Board. The Council of Safety Associations comprises nine safety organizations and the Board, working cooperatively to promote education in accident prevention.

First Aid

For several years the Board has encouraged employers to train their employees in First Aid, to comply with the First Aid Regulations under the Workmen's Compensation Act. This encouragement has taken the form of underwriting the cost of St. John Ambulance training for up to two employees per shift per location.

Public Relations

The Board co-operates with the Ontario Federation of Labour in providing speakers for OFL workshops organized to study compensation and safety in the province and promotes safety and awareness of Ontario's compensation system.

The Communications Division is responsible for production and distribution of Board publications and other public information material of a general nature including corporate periodicals, brochures and advertising.

Canada Safety Council (Occupational Section)

1765 St. Laurent Blvd. Ottawa, Ontario K1G 3V4

Contact

Arthur Bray Manager, Occupational Section (613) 521-6881

Objectives

To be a national co-ordinating body working in close liaison with federal, provincial and territorial public authorities, national and provincial associations, industrial and business management, and labour organizations to minimize occupational fatalities, injuries, disease, toxic impairment and property damage in all workplaces in Canada.

To act as a sounding board for new ideas and techniques, a forum for expression of all points of view, a central clearing house of information and material, to point the direction for safety programming in Canada, to make programs available nationally where required, and to act as the national voice for occupational safety and health.

Activities

The Council gives awards to business and industry to recognize achievement in occupational injury and disease-free performance, issues hazard warnings, provides information from its library to groups, contributes to the development of standards and codes through representation on committees of the Canadian Standards Association and holds an annual National Safety Conference plus special technical conferences and seminars.

Publications

In addition to its monthly publication Safety Canada the Council is publishing a number of technical data sheets. The Council has published a four-volume catalogue of educational resources, an eye protectors identification list, and an information source book (Directory of Occupational Safety and Health Organizations). A series of posters is also available.

Construction Safety Association of Ontario

74 Victoria Street Toronto, Ontario M5C 2A5

Contact

L. Sylvester, General Manager (416) 366-1501

Objectives

The Association is the organization through which the province's general and special construction trade contractors establish and implement standards essential in matters of safe working practice and accident prevention.

Activities

The fundamental principles of safe working procedures are taught to all in the industry. Through statistical and engineering research techniques, industry hazards are pin-pointed, as well as the methods to detect and effectively circumvent accidents that result from such hazards.

Technical Safety Courses

A number of courses are presented in French, Italian and Portuguese, as required.

Access Structures: Videotape and/or discussion (two hours)

Carpentry Courses: Electrical Power Saws; Discussion, film and slides. (two hours)

Chain Saws: Demonstration, discussion, film and slides. (two hours)

Concrete and Formwork Construction: Discussion and film. (two hours)

Dump Truck Operators: Discussion, slide presentation. (one and a half to two hours)

Electrical General: Discussion, film and slides. (one to two hours)

Electrical Special: Discussion, film and slides. (one-half to two hours) Tailored to a specific trade

Electrical Specialists: Discussion, film and slides. (one to two hours)

Explosive Actuated Tools: Discussion, practical demonstration and visual aids. (two. two-hour sessions)

Hoists, Cranes, Derricks: Discussion, slides and film. (one to two hours)
International Hoisting Signals: Discussion, film and practical sessions. (two hours)

Ladders, Scaffolds & Swing Stages: Discussion, film and slides (one to two hours)

Locktender's Course: Discussion, slides, diagrams, etc. (three hours)

Precast Concrete: Discussion and slides. (one-half to one hour)

Resilient Flooring: Discussion and slides. (one to one and one-half hours)

Safe Rigging—Basic: Discussion, slides and practical instruction. (four sessions of two hours each)

Road Construction: Discussion and film. (one to two hours)

Roofing: Discussion and film. (one hour)
Safe Operation of Heavy Equipment:
Discussion, film and slides. (two hours)
Safe Rigging and Hoisting: Discussion,
film, slides and practical instruction.

Safety Belts & Lanyards: Discussion, film and practical demonstration. (two hours)

(eight sessions of two hours)

Silo Construction: Discussion, film and slides. (two hours)

Temporary Winter Heating: Film and slides. (one and one-half to two hours)
Traffic Control: Discussion, film and

Trenching & Excavating: Discussion, film and slides. (one to two hours)

Tunnelling: Discussion, film and slides. (two hours)

Welding & Cutting: Discussion, slides and practical demonstration. (two hours)

Working in Confined Areas: Demonstration, discussion, film and slides. (eight hours; four sessions of two hours each)

Special Courses

slides. (one hour)

Accident Investigation & Reporting: Discussion and film. (two and one-quarter hours)

Apprenticeship Safety Training: Film and slides

Basic First Aid: Discussion and film. (two hours)

Community Colleges: With the assistance of the Ontario Ministry of Colleges and Universities, three-day Safety Seminars may be conducted for Technical Instructors in the Province of Ontario.

Communications—Principles & Application: Discussion. (two hours)

Construction Safety Act: Discussion. (two hours)

Effective Foremanship: Presentation and discussion. (eight hours; four two-hour sessions)

Fire Prevention: Discussion, film and slides. (one to two hours)

Housekeeping: Discussion and slides. (one to two hours)

Individual Responsibilities: Discussion. (one-half to two hours)

Introduction to Accident Prevention: Presentation and discussion (one and one-half hours, with films two and onehalf hours)

Managing and Motivating Your Personnel: (six sessions of two hours duration)

Personal Protective Equipment: Discussion, film and visual aids. (one to two hours)

Head Protection
Eye Protection
Hand and Foot Protection
(Dealt with individually or collectively, as desired.)

Safe Lifting Procedures: Discussion and film. (one half-hour to one hour)

Safety Supervisors' Seminar: Discussion, film and slides. (three days)

Secondary School Program: Discussion and film. (one and one-quarter hours)

Supervisory Training Course, Building A Safe, Effective Work Team: Discussion and presentation (12 hours—six, two-hour sessions)

Mobile Classrooms

To facilitate the presentation of safety education to construction workers at job sites and in remote areas in Ontario, the

Construction Safety Association has two mobile classrooms. The classrooms are equipped with power generator, heating and air conditioning. Visual aids and equipment pertinent to teaching specific courses are a part of the mobile classroom. Each operator is a qualified instructor and presents courses assigned to him in conjunction with other staff members.

Publications

Report Forms

First Aid Record Form
Monthly Project Injury Report
Supervisor's Report of an Accident
Company Injury Record Pads

Research Publications

Four Year Fatality Study
Foot Protection—1973 Edition
What Do Construction Accidents Cost?
Construction Management Policies for
Accident Prevention and Greater Profits
General Motors Accident & Loss Prevention Policy

An Evaluation of the Demolition Industry in Ontario and its Injury Record

Orenda Engines—Swing Stage Hoisting Equipment

Hand Injury Study

Rope-Grabbing Devices—1973 Edition Injuries in the Erection Industry Drilling and Blasting Guidelines Acceleration on Erection & Systems

tem Building
Backing up Accidents

First Study of Accident Causes— Electrical/Mechanical

Equipment Rollover

Who Needs Deafness? (State of the Art in Noise in Construction)

First Trade Accident Prevention Seminar (Electrical)

Current Research on Safety Belts, Lanvards & Lifelines—1975

Construction Winter Heating—1975
Electrical Safety of Cord Connected
Double Insulated Tools After Prolonged
Use—1976

In addition, the Association publishes a wide range of other printed material, including stickers and decals, booklets, folders, manuals, payroll stuffers and posters.

Council of Safety Associations

20th Floor 2 Bloor Street East Toronto, Ontario M4W 3C3

Contact W.A. White, Chairman (416) 965-8726

Objectives

members from the nine safety organizations (Construction Safety Association, Electrical Utilities Safety Association, Farm Safety Association, Forest Products Accident Prevention Association, Hospital Accident Prevention Department of the Ontario Hospital Association, Industrial Accident Prevention Association, Mines Accident Prevention Association, The Ontario Pulp and Paper Makers Safety Association, and the Transportation Safety Association) and a senior executive represent-

The Council was formed in 1974 with

The Council was established primarily to co-ordinate the activities of the associations and to ensure effective communication and working relationships between them and the Workmen's Compensation Board.

ing the Workmen's Compensation

Activities

In addition to serving as a clearing house for ideas and information about accident prevention education, the Council fosters programs designed to promote accident prevention. It also recommends where there could be cooperation among the associations and the Board in educational activities such as seminars and conferences.

Electrical Utilities Safety Association of Ontario

81 Kelfield St., Unit 1 Rexdale, Ontario M9W 5A3

Contact

H.J. Schmidt J.A. Torrance, P. Eng., General Manager J. Craig, Managing Secretary Treasurer (416) 249-7837

Objectives

The Association was created by the authority of the Workmen's Compensation Act. There are about 500 members from municipal electric utilities, municipal telephone systems, private power companies, private telephone companies, private contracting firms (electric and telephone), cable television firms, the Ministry of Transportation and Communications (electrical department) and line clearance contractors.

Activities

Most of the Association's work involves scheduled crew safety meetings held on the individual member's premises. Nonscheduled field surveys are conducted during which tools, equipment, work conditions and practices are inspected, observed and discussed with the supervisor or crews and recommendations made to management. Visual screening, a test of visual performance of the employee, is another service offered the members. The Association operates a training school at Rexdale, Ontario, and periodically holds conferences throughout the province.

Training Courses

Effective Supervision: Introduction to Basic Supervisory Skills: Rubber Gloved Hand Techniques (to 15 kv.); Rubber Gloved Hand Techniques (15 kv. to 35 kv.); Live Line Tool Techniques; Methods and Safe Use of Equipment in Electrical Testing of Cable and Fault Locating in Underground Systems: Methods and Safe Use of Equipment in the Route Tracing of Buried Cables; Underground Proficiency; Hydraulic Aerial Equipment; Lineman, Journeyman Proficiency; Line Clearing; Accident Prevention Training Course; Cable Television and Telephone; and Utility Protection Code.

Publications

Manuals

- 1.Safety Rule Books (Electric Operations and Telephone and Cable TV)
 2.Safe Practice Guides:
- a) Explosives 1/71
- b) Pole Handling 1/72
- c) Bare Hand Live Line Methods 4/72
- d) Work Area Protection on Roads and Highways 1/73
- e) Tension Stringing 2/73
- f) Utility Protection Code 1/74
- g) Line Clearing Operations 1/75

Reports

- 1.Annual Frequency Report
- 2.Annual Report of Manager and Secretary-Treasurer

The Association also publishes bulletins and calendars.

Audio-Visual Material

A film list is available from the Association. There is no rental charge to Association members but there is a service charge of \$1.50 per film per day for non-members.

Farm Safety Association

The Park Mall 2 Quebec Street Guelph, Ontario N1H 2T3

Contact

Jane Reed, Executive Secretary (519) 823-5600

Objectives

The Association was founded in January 1973 to promote safety, provide safety education for Ontario farmers and reduce the number of accidents on Ontario farms. The Association is directed by a combination of elected and appointed farm employers representing a wide range of agricultural commodities produced in Ontario. It is one of the nine safety associations supported by the Workmen's Compensation Board.

Activities

Association field personnel are located throughout the province. Programs include: commodity safety programs, elementary school safety presentations, 4-H and Junior Farmer programs, involvement with county safety associations, farm safety displays, farm accident statistics program, farm visits, seminars and speeches.

Research

The Association has provided a grant to a University of Toronto graduate student who is currently investigating the epidemiology of farm accidents.

Publications

The following publications are currently available:

What is the Farm Safety Association Tractor Accidents

Forage Harvesting Dangers

You're Only 1/2 Safe

Workmen's Compensation and the Farmer

FARMSAFE (bimonthly newsletter)
Eye Safety on the Farm

Forest Products Accident Prevention Association

183 First Avenue West Box 270 North Bay, Ontario, P1B8H2

Contact

T. Woollings, President, R.H. Ewalt (705) 472-4121

Objectives

The Forest Products Accident Prevention Association was established in accordance with Section 117 of The Workmen's Compensation Act. The active membership of approximately 1,200 member firms includes companies in Ontario engaged in Logging, Sawmilling and Veneer-Plywood operations. The Association is governed and financed by these industries and the W.C.B.

The objectives of the Association are to reduce the number of accidents causing injury to workmen and to reduce downgrading accidents that cause financial loss to companies and have injurycausing potential.

Activities

The province is divided into 9 areas with a district representative living and working in each area. Each representative determines the needs of individual companies by a loss control evaluation and assists management to implement an accident control program tailored to specific needs.

Accident Control Education

Training Courses

a) Management

1.Total Loss Control Seminars

2.T.L.C. Program, Co-ordinator course

b) Supervisory

1.Basic Accident Control

2.Advanced Accident Control

3.Communications for Safety

4. Human Relations

5.Job Instruction Training

6.Job Simplification

c) Employee

1.Employee-Management Safety Com-

2. Woods Operation Felling Techniques

3. Power Saw Chain Filing and Maintenance

Publications

Posters and Publications for Accident Prevention

Manuals:

Logger's Code Sawmill Code Truck Haulers' Code Profitable Skidding

Audio-Visual Material (most available in English and French)

16mm Movies-The association maintains a film library containing films relating to safety in the industry, educational films and films for general industry. Films are provided to member firms on loan at no charge. A fee of \$5.00 per week, plus shipping costs, both ways, is charged to other organizations. Film catalogues are available on request from the North Bay Office.

Video Tape Recording-The Association is producing video tapes for training and evaluation purposes and will be developing a library of tapes on existing and new production methods and equip-

Industrial Accident Prevention Association of Ontario

9th floor 2 Bloor St. East Toronto, Ontario M4W 3C2

Contact

J.V. Findlay, General Manager (416) 965-8888

Objectives

Under the authority of the Workmen's Compensation Act, the IAPA receives its operating funds from the Workmen's Compensation Board. It is a federation of 10 safety associations serving the manufacturing and retail sector of Ontario. The Association has a staff of 127 and covers about 53,000 firms which collectively employ more than 1.1 million persons.

Activities

Safety consultants assist members to set up accident prevention programs based on the number of employees and type of operation. This includes discussions with management on loss control problems and related costs; training of supervisory personnel; consultation on unsafe conditions and unsafe acts and provision for instruction of company employees in carrying out accident investigations and plant inspections; work with safety committees; in-plant instruction to employees, etc. Engineers and technical specialists deal with problems of industrial hygiene and health and produce technical memoranda.

The IAPA Education Centre in Toronto conducts a variety of management, technical and supervisory courses in accident prevention, occupational health and loss control management. It also houses a safety film lending library and an industrial workshop. Courses are available to member firms and others. Courses may be given in other parts of Ontario as required.

Resource and development services: In addition to responding to specific requests for information, this department co-ordinates and organizes the flow and distribution of information; maintains a library and literature service; conducts surveys for developing plans and evaluates the effectiveness of accident prevention programs; assists in the identification of high-risk groups in

industry; aids in the development of educational programs; provides a consulting service on legislation, speeches, etc.; liaises with organizations having similar objectives and provides a bilinqual service as needed.

It is a voluntary organization of more than 2,200 from industry which, in combination with IAPA staff, arranges meetings, education courses, seminars, group workshops, fork lift truck competitions, safety rallies, etc. across the province.

It has a general education approach through the use of a newsletter, posters, pamphlets, special publications and a film library. A "Guide to Safety" is prepared each year containing 12 monthly topics, a suggested 5-minute talk and discussion guide related to the yearly theme and information for the use of supervisors in their presentations. Three other topics are included as alternates. (English and French)

Special promotional materials are available each year to conduct a kick-off campaign in January and to supplement a company safety program during the year.

A continuing awards program is carried out to recognize firms and individuals doing an outstanding job in safety. A program to encourage safety in schools is carried out. An annual conference and safety exhibit is organized.

Literature from the Association is available free to firms in Classes 3, 4, 6-19 and 26 as classified under the Workmen's Compensation Act, and also to any school or labour union in Ontario. All others may obtain these items at current cost prices.

Film Library

It is one of the largest in Canada. More than 400 films are available in 16mm sound, in black and white and colour. There is no rental charge to member firms, paid subscribers or schools for the loan of these films but non-member firms are required to pay a service charge. A film catalogue is available on request.

Courses

(for course outline see I.A.P.A. Pamphlet 505—Education for Safety)

Dunation	Fac	F
Duration	Hee Members	Fee Non- members
1 day	\$10.00	\$15.00
2 days	25.00	35.00
1 day	10.00	15.00
1 day	10.00	15.00
1 day	10.00	15.00
4 days	25.00	35.00
2 days	25.00	35.00
4 days	50.00	75.00
* Home stud	y 18.00	20.00
2 days	25.00	35.00
1 day	10.00	15.00
2 days	25.00	35.00
1 day	10.00	15.00
4 days	25.00	35.00
6-8 weeks	by arrange	ement
	2 days 1 day 1 day 1 day 4 days 2 days 4 days * Home stud course 2 days 1 day 2 days 1 day 4 days	Members 1 day

^{*}Available by correspondence, at individual's own pace; as in-plant course per firm's schedule; by evening group weekly for 16 weeks, scheduled by sponsoring I.A.P.A. Divisions and Sections.

Publications

Loss Control Management by Frank Bird and R.G. Loftus

Damage Control by Frank Bird, George Germain

Effective Loss Prevention by M. Joan Crowe and Hugh Douglas

Graphic Arts Manual

Help Yourself by C.J. Laurin

Industrial Environment by Jack Fletcher Management Guide to the Problem

Drinker

Safety Management Articles reprinted from Accident Prevention from January 1971 to February 1975.

Selected Readings in Safety

Total Environmental Control by Jack Fletcher and Hugh Douglas.

Educational Material

Education for Safety brochure, listing I.A.P.A. Education Seminars "Effective Series" (teaching course),

four manuals with slides. Subjects: Effective Job Instruction, Effective Coaching and Tipping, Effective Safety Talk Technique, Effective Safe Behaviour Reinforcement.

Film Catalogue (Listing all I.A.P.A. films)
Getting it Done Right by Frank Bird
(Audio-Visuals)

Management Guide to Loss Control—Study Course (English and French) (278 slides for the 16 chapters) Systems Safety Management by William C. Pope (with slides)

Guide to Safety and Key Point Cards (English and French)

Kick-off Campaign Materials

Technical Services Memoranda

Notes on Emergency Organization Six Basic Steps to Organizing the Plant Fire Brigade

Guide for Employees on the Use of Portable Fire Extinguishers

Consideration in Selecting Portable Fire Extinguishers

Industrial Hygiene

Background Information on a Hearing Conservation Program

Dusts, Fumes and Mists in Industry Guide for Selection of Gloves

Some Aspects of Clothing in the Working Environment

Background Information on a Chemical Control Program

Incompatibility of Chemical Compounds
Background Information on Colour in Industry

Background Information on Static Electricity

Background Information on Degreasers and Their Operation

Background Information on Low Volume High Velocity Systems for Dust Control Combustible Gas Indicators Sources of Error

Work Permit Systems

Material Handling

Respiratory Protective Equipment

Tank Cleaning

Background Information on Entry Into Confined Spaces

Background Information on Garage Ventilation

Background Information on Chemical Processing Safety

Background Information on the Safe Use of Teflon

Background Information on the Safe Use of Polyster and Epoxy Resins

Background Information on the Safe Use of Cadmium, Cadmium Compounds and Alloys

Background Information on the Safe Use of Power Actuated Tools

A Guide for Employees in the Safe Handling and Use of Acetylene

Background Information on Chains, Ropes and Slings

Background Information on Lock-out Procedures

Background Information on Ozone
Background Information on Storage Batteries

Background Information on Sawdust Burning

Solvent Extracted Oil Seed Meal Hazards

Industrial Lighting

Chlorinated Hydrocarbon Solvents Ventilation for Welding and Cutting

I.A.P.A. also has a number of brochures, forms, reports and pamphlets available.

Mines Accident Prevention Association of Ontario

290 Second Avenue West North Bay, Ontario P1B 3K9

Contact

Leo C. MacDonald, Field Director (705) 472-4140

John E. Ridout, Manager—Administration 199 Bay Street, 10th Floor, Toronto, Ontario M5J 1L4 (416) 364-9301

Objectives

The members of the Association are employers covered by Class 5 of the Regulation under The Workmen's Compensation Act. The Association provides counselling and education for its approximately 550 member firms and offers a wide variety of services in the areas of safety, ventilation and dust control and industrial hygiene.

Activities

The Association has eight registered professional engineers and two technologists who regularly visit member companies and two laboratory technicians who take and count dust samples and do asbestos fibre counting.

Consultative Services The Association's engineering staff is available to conduct engineering studies, review and develop programs, and consult in all areas of safety, ventilation and dust control, and industrial hygiene.

Counselling Service on safety aspects of work methods and of machines and equipment; dust content in air at work and travel locations; fire hazard potential in underground workings and in surface plants engineering control of noise at work locations on surface and underground; supply of fresh air at work locations and control of hazardous materials.

Education and Training Services The staff offers various courses in safety, ventilation and dust control, noise control and communications. Courses are put on at the Association's training facilities or in the field.

Speaking Engagements Guest lecturing at McGill University, Haileybury School of Mines, Lansing Ventilation Conference and others.

Committee Representation Participation on various committees of Canada Safety Council, Canadian Standards Association, The National Safety Council, Air Pollution Control Association, and others.

Organizing Organization and co-ordination of local safety and ventilation groups.

Annual Meeting and Technical Sessions The Annual Conference draws delegates from across Canada and abroad. Papers presented at the sessions are published in whole or as abstracts in the Canadian Mining Journal and the Northern Miner.

Visual Aid Library The Association maintains a comprehensive visual aid library. Visual aids are made available to member companies first and then to other mines and mining associations in that order. They may be obtained from the Association at the above address. There is no charge for the use of visual aids except that the user is expected to pay the cost of returning them and to reimburse the Association for loss or damage.

Publications

Annual report containing a statistical review of work injuries and industrial diseases with suggestion for prevention.

Monthly Safety Reminders, Prospectors Bulletin, and Incident Reports.

Monthly and annual records by firms of injury frequency, together with medical costs and compensation payments.

Monthly safety posters.

Safety News—Editorials, pictures and articles.

Design Criteria for Noise Control.

Ontario Pulp & Paper Makers Safety Association

2 Bloor Street East 9th Floor Toronto, Ontario M4W 3C2 (416) 965-8900

Contact

W. Lockhart, Manager (416) 249-8591

Objectives

The function of the Ontario Pulp and Paper Makers Safety Association is mainly one of safety education among the management, supervisory and work force of member companies engaged in the production of fine papers, pulp, newsprint, corrugating materials and corrugated containers, logging specific to the member mills, and a few assigned related manufacturers.

Activities

Training courses for the industry's employees are developed by OPPMSA staff and are conducted on a request basis. Visual aids to assist in accident prevention and supervisory development are frequently produced by the staff. This includes training films for accident prevention functions. The films are used by member firms, free of charge, and as occasion permits are rented to others at a reasonable rate.

The staff produces booklets and pamphlets covering specific areas of need, particularly in supervisory development. These are available to member firms at cost and, on occasion, to others at cost plus handling charges. Statistical information on accident prevention performance is published monthly for the benefit of member firms and other interested parties.

Transportation Safety Association of Ontario

9th Floor 2 Bloor St. E. Toronto, Ontario M4W 3C2

Contact

Howard MacDonald, General Manager (416) 965-8911

Objectives

The Association is authorized under the Workmen's Compensation Act. Its purpose is to reduce, by educational methods, the number of industrial accidents within its member companies. The 11,500 member firms are in the following industries: highway and air transport, teaming, cartage, warehousing, storage, forwarding, stevedoring, coal, wood, lumber yards, ready-mix concrete, builders' supply, kiln drying, creosoting of timbers, coaches and taxis and dealers in secondary materials.

Activities

The Association offers the following services to members:

- Gathering and distributing facts and information about causes of injuries and prevention methods.
- Conducting meetings with employees of member firms to stimulate interest in accident prevention and safe work practices.
- Participating in meetings to acquaint employers and managers with the latest developments in safety.
- Conducting surveys of members' premises and recommending changes in the interest of safety.

Other activities include: counselling, organizing plant safety committees, plant inspections, plant safety programming and seminars. Continuing programs include: annual safe driver award banquets, company safety awards, district safety meetings, employee safety meetings and the safe driver award program.

Courses

The Association offers the following training courses: Commercial Driver Improvement Course; School Bus Driver Improvement Course; Fork Lift Operators Course; Supervisory Training Program, (a) Techniques of Training and (b) Techniques of Accident Investigation; Testing Drivers (Porto-Clinic) and Training Drivers-Trainers.

Publications

The Association distributes a monthly bulletin and monthly safety posters to all members. It also publishes a number of brochures, bulletins and manuals.

Audio Visual Material

A large library of films pertaining to the different industries covered by the Association is available to members only.

Ontario Hospital Association

Hospital Accident Prevention Department 150 Ferrand Drive Don Mills, Ontario M3C 1H6

Contact J.D. Callan, Director (416) 429-2661

Objectives

The Department was organized in 1968 to provide education in accident prevention for employers and employees included in Class 25, Group 1 of the Workmen's Compensation Act. Employers include public and private hospitals, nursing homes, sanatoria, visiting nurses' associations and some homes for the aged. Services are also provided to psychiatric facilities although they are not in the same assessment classification. Policies for the Department are established by the Hospital Association's Board.

Activities

The Department encourages member institutions to establish formal accident prevention policies; have periodic inspections; and report, investigate and record all accidents. The Department supplies materials and promotional aids, provides guidance to members and undertakes special studies into specific problem areas. In addition, the Department also assists employers in improving their working relationship with the Workmen's Compensation Board and in managing WCB claims affairs.

Staff assists institutions in organizing, developing or auditing the function of formal accident prevention programs and conducts seminars and other educational activities. The Department also

provides an information service. Inquiries concerning specific problems in the prevention of accidents to employees, patients or visitors are invited. Several brochures and posters are available to assist in the accident prevention activity as well as an accident investigation forms system on which a statistical reporting program is based.

The Department's Accident Prevention Film Library contains 65 titles, most of which apply directly to safety in the health-care field. Accident Prevention Achievement awards are issued annually to employers in various groups, the awards being based on frequency rate of lost-time injuries.

Services, promotional films and brochures are available to employers in the above classification without charge. Outside organizations may purchase materials or rent films.

Du Pont of Canada Limited

General Products Division Montreal, Quebec H3C 2Y1 (514) 636-4580

Activities

Safety Training Courses

Three Safety programs developed by E.I. du Pont for internal use are offered for sale to the general public. Detailed information and prices are available from the General Products Division, (514) 636-4580.

The three programs, all of which utilize the programmed instruction technique, are:

New Employee Safety Training—A generalized course on safety philosophy and principles designed for the new employee.

Safe Practice Series—Courses designed to train wage-roll employees. Two introductory units of safety philosophy establish basic principles which are used throughout the other units of the series to develop safe practices for many of the jobs the employee performs.

Safety Training Observation Program—A program designed to improve safety performance by making skilled safety observers of all supervisors from the plant manager to the line foremen. It focuses on the unsafe acts of people, which account for more than 90% of injuries.

Publications

Safe Handling of Explosives/Leaflets: Do's and Dont's—brief instructions in the safe method of transporting, storing and using commercial explosives. (English & French Text).

Danger! Blasting Caps—Tools Not Toys—designed for use in schools. A warning to the young about the misuse of blasting accessories and explosives. Separate English and French versions.

The material is available from either the Explosives Division or the Public Relations Division (514) 861-3861.

Ford Motor Company of Canada, Limited

Box 2000 Oakville, Ontario L6J 5E4 (416) 845-2511

Publications

The Eyes Have It Helpful Hints for a Safer Ride The Keys to Dad's Car

Audio-Visual Material

As a public service the company has available a number of 16mm sound films on Driver Education. These films may be obtained on loan by contacting:
Educational Film Distributors Ltd.
191 Eglinton Avenue East
Toronto, Ontario
M4P 1K1
(416) 489-2314
(416) 489-2526

A film list is available on request.

Gulf Oil Canada Limited

800 Bay St., Toronto, Ontario, M5S 1Y8

Contact

V.A. Barker, Occupational Hygienist (416) 924-4141 ext. 5281

Objectives

To provide occupational health guidance to operating departments and employees of Gulf Oil Canada Ltd.

Activities

Internal company education and training and membership in various occupational health committees and associations.

Publications

All publications are for internal company use but are made available to government departments and other bodies on request.

Product Toxicology and Characteristics Manual

Industrial Hygiene and Toxicology Manual

Health Hazard Memo Series Hear Today Gone Tomorrow (Videotape

Benzene and Health

on hearing conservation).

Uniroyal Ltd.

Research Laboratories, 120 Huron St. Guelph, Ont.

Contact

E.E.J. Wakefield, P. Eng. Senior Group Leader, Environmental Services (519) 822-3970

Activities

Performs studies or analyses for companies and government departments, on a fee basis. For more information see Section 9. "Laboratory Testing Facilities."

Canadian Paperworkers Union

160 Overholt Place North Bay, Ontario P1B 7X8

Regional Office: Suite 202, 6205 Airport Road Mississauga, Ontario L4V 1E1

Contact

R.J. Casson, Representative (705) 474-9611

Objectives

To promote healthful and safe work environments and to safeguard the general environment.

Activities

Continued involvement in all aspects of the Union's objectives through normal business activity and the promotion and development of specific projects.

Publications

Canadian Paperworkers Journal

International Brotherhood of Electrical Workers

45 Sheppard Avenue East Suite 401 Willowdale, Ontario

Contact

K.G. Rose, International Vice-President (416) 226-5155

Objectives

To promote active participation of its members in the prevention of accidents and injuries at work and off the job.

Activities

The IBEW Constitution requests each of its Local Unions to establish a Safety Committee. These committees' functions are to investigate and report serious accidents and fatalities; co-operate with the International Office on safety matters; promote safety and co-operate with safety organizations as determined by the Local Union and as directed by the International Office.

Publications

Safety Standards for the Electrical Industry

IBEW Safety Guide for Local Unions Safe Work Practices Aerial Baskets— Electrical Industry

The Electrical Workers Journal

Audio Visual Material

IBEW provides a series of films on accident prevention. These films are available on a free-loan basis by contacting the International Vice President at the above address.

Oil, Chemical and Atomic Workers' International Union

67 Lakeshore Road East Mississauga, Ontario L5G 1C9

Contact

John More, International Representative (416) 274-1263

Objectives

To promote public awareness to preventive approach on occupational health and safety matters through educational programs and legislation; develop individual awareness toward better understanding of occupational safety and health programs; promote the establishment and maintenance of a safe and healthy working environment.

Activities

Reviews occupational health and safety matters and related legislation. Plans various educational, training and other activities. Promotes research and works towards the establishment of joint union-management safety and health committees. Organizes occupational safety and health review meetings. Advises on occupational health and safety educational programs and provides training through general programs or individualized programs related to specific hazards such as dust, asbestos, noise, radiation, carcinogens, physical agents and many others. Sponsors training programs in occupational safety and health at several Ontario colleges and

Research

The Union, through the International Office in Denver, Colorado, allocates funds for education and research.

United Auto Workers

205 Placer Court Willowdale, Ontario M2H 3H9

Contact

Larry Sheffe, Sub-regional Director (416) 497-4110

Objectives

Organization of workers and humanization of the workplace.

Activities

Provide consulting services to local unions on matters related to occupational safety and health. Develop training programs for use of health and safety committees of local unions. Active participation on committees involved in problems in occupational safety and health.

Publications

Solidarity Solidarity Canada UAW weekly newsletter

United Steel Workers of America

55 Eglinton Avenue East Toronto, Ontario M4P 1B5 (416) 487-1571

Contact

Kenneth Valentine, Director, Health and Safety Department

Objectives

Promote the establishment and maintenance of a safe and healthy working environment.

Activities

Reviews safety matters and safety legislation, plans various educational, training, research and other activities, works for establishing of joint unionmanagement safety and health committees.

Organizes, safety and health review meetings, and provides safety and health education and training by (1) general programs or (2) individualized programs related to specific jobs.

Some USWA sponsored courses with universities and colleges are:

Laurentian University, Sudbury Night course, one night per week for 8 weeks, 3 times in 1976.

Haileybury School of Mines, Haileybury One week, annually

Sault College, Sault Ste. Marie Radiation

Humber College, Rexdale On weekends

McMaster University, Hamilton Summer school one week three times

The USWA, INCO, STELCO and other companies are allocating funds for research to McMaster University and others. (See Section 8, "Research Projects").

Publications

USWA Safety Manual and USWA Safety and Health Program brochure.

Humber College of Applied Arts and Technology

Technology Division P.O. Box 1900 Rexdale, Ontario M9W 5L7

Contact

Don Stemp coordinator of the Safety Technology Program (416) 675-3111

Objectives

In response to the increasing need in industry, labour, and government for trained people to develop and implement more complex programs in safety and health, Humber College offers programs in Safety Technology leading to certificate and diploma levels.

Activities

Three-year course

A three-year course of study is available primarily for high school graduates who wish to enter a career in safety and health. In addition to core subjects such as mathematics, physics, chemistry and English, specific courses in safety and health are included. Among these are Total Loss Control, Occupational Health and Safety, Fire Protection, Environmental Pollution Control, and Product and Public Safety. Emphasis is also placed on management subjects as well as in the area of human relations. Upon completion of the program, a Diploma of Safety Technology is awarded. After a period of experience, certification may be obtained as Engineering Technologist.

Credit courses

Credit courses are available during the evening or on a part-time basis (one afternoon a week). Upon completion of 12 courses, a Certificate of Safety Technology is obtained. Upon completion of 24 courses a Diploma in Safety Technology is granted and certification may be obtained as an Engineering Technician. Similarly, upon completion of 36 courses, the Engineering Technologist level may be achieved. Exemption may be obtained for courses already completed as part of another program.

Training programs

Specialized training programs have been developed in the area of safety and health that are relevant to the specific needs of a particular organization. Seminars for various clients have been conducted at the college as well as at different locations throughout Canada. A home study course is developed for the Department of Public Works of Canada and is being administered nationwide by Humber College. The expertise and facilities of the College are available to assist in the development and implementation of special programs. Proposals are prepared on request.

Council of Ontario Faculties of Medicine

Sub-Committee on Environmental and Occupational Health

Contact

Dr. G. J. Stopps, Chairman of the Sub-Committee, Faculty of Medicine, University of Toronto (416) 978-6954

Objectives and Activities

The Subcommittee has been set up by the council to provide liaison on environmental and occupational health matters among the five Ontario Medical Schools. The subcommittee is bringing together information on the educational, research, informational, and service roles of each of the constituent schools—Toronto, McMaster, Queen's, Western and Ottawa.

McMaster University

Labour Studies Program Room 121, Gilmour Hall Hamilton, Ontario L8S 4L8

Contact

Professor H.J. Waisglas, Director (416) 525-9140, ext. 4692

Objectives

To make education and research facilities readily available to workers and labour unions. To act as liaison between the unions and the scientific community for the improvement and expansion of education and research in the health field.

Activities

Develops special programs designed for the continuing development of knowledge and skills of the executive, administrative, professional and technical personnel of labour organizations, such as the continuing education plan being developed, in co-operation with the CLC and the OFL, for union staff responsible for occupational health in the safety movement. Also, a special course is being designed on effective instructional methods, techniques and skills for union instructors.

Research

Facilitating, consulting, liaison and advisory services in union-university relations on research matters, to assure good communications, identify problems for research and assure union understanding and support for research activities.

Occupational Health Program 1200 Main Street West Hamilton, Ontario L8S 4J9

Contact

Dr. K.C. Charron, Director (416) 525-9140, ext. 2333, 2334

Objectives

 To provide in general an academic focus for study, teaching and research on the effects of work on health and health on work, and to provide consultant services in this field.

- To ensure that the students in the health professional program appreciate the importance of the interplay between work and health, and to provide teaching in an organized and co-ordinated manner.
- To ensure that the various groups interested in work and health and those with the skills to study health problems related to work are able to carry out effective and relevant research.
- To provide, if there is the need, a program for the professional training of doctors and health-related professionals in occupational health.
- To serve as a community, regional provincial and national resource for consultation in respect to occupational health problems.

Activities

The program will have three areas of activity—education, research and consultant and advisory services.

Education

Educational activities will comprise four functions—integration of occupational health programs into existing programs; special courses in occupational health designed for physicians, nurses, occupational health engineers, psychologists, social workers, radiation physicists, epidemiologists and others as required for occupational health; upgrading arrangements for personnel already involved in occupational health; and continuing education to maintain competence.

Research

An attempt will be made to define research priorities through discussions with the Ministries involved, labour and management interests, and bodies such as the Research and Development Committee of the Ontario Council of Health. The objective will be to develop areas of excellence in certain research fields which will then be identified as receiving particular emphasis at McMaster University. The areas of excellence which might be identified with McMaster are respirology, epidemiology and biostatistics, industrial toxicology and the occupational and environmental clinic at St. Joseph's Hospital. The research program will also develop an ability to handle contract and mission-directed research.

Consultant and Advisory Services

The expertise in the program will provide a valuable consultant resource to the Province and an increasing number of requests are being received for this service from industry and labour. Furthermore, the Steelworkers—International Nickel Occupational Health Program is identified with McMaster and we anticipate similar developments for other large industrial settings. Consultant and advisory service to small industries will be a particular thrust.

Queen's University

Section of Occupational and Environmental Health Dept. of Community Health and Epidemiology Kingston, Ontario K7L 2N6

Contact

Dr. Ronald E.M. Lees, Associate Professor (613) 547-6685

Objectives and Activities

To provide instruction in occupational health and safety for medical undergraduates and students in other faculties and departments. To initiate and undertake research in occupational and environmental health, at times in conjunction with other interested organizations. To provide advisory and consultative services to industries, labour organizations and public authorities in Eastern Ontario.

The Section currently has two studies in progress:

The use of Health Hazard Appraisal as a vehicle for health education in a factory work-force.

An attempt to define precursors of early noise induced hearing loss.

University of Toronto

Faculty of Medicine The Environmental and Occupational Health Unit

Contact

Dr. G.J. Stopps, Acting Director (416) 978-6954.

Objectives

The unit's goal is to improve knowledge and practices relating to occupational and environmental health problems amongst workers, the general public, health professionals and management. It aims to promote and maintain the highest level of health for workers in all occupations, help to ameliorate the effects of industrial and other pollutants on residents, and to identify the sources and suggest solutions to occupational and environmental health problems in general.

These goals will be pursued through: continuation and strengthening of the existing teaching program in occupational and environmental health; increased research activities (both short and long range); informational services including print, film and television; and service functions in which staff and students engage in problem solving investigations in the field.

The Environmental Health Secretariat

Contact

Vice-President, Research and Planning, University of Toronto. (416) 978-2703.

Objectives

This is a new, university-wide organization recognizing the essentially interdisciplinary nature of occupational health and environmental health problems and working closely with the environmental and occupational health unit within the Faculty of Medicine as well as all other faculties with interests in the area. It will also work closely with the Institute for Environmental Studies. Its goals are:

•To promote and facilitate research, education and communications in environmental health at the University of Toronto and its associate institutions.

- •To provide a tangible focus for the activities associated with the aims in paragraph (1), both within the university and in the wider community.
- To encourage interdisciplinary approaches to environmental health problems.

Undergraduate programs

Medical undergraduates receive teaching in occupational health during their consideration of each of the functional "systems" of the body, e.g. occupational chest disease will be discussed during the teaching of respiratory system. In addition the undergraduate receives individual lectures in occupational health and electives are offered in this subject.

Postgraduate courses	Enrolment 1976-77
Environmental Health (1318)	25
Environmental Health for Engineers (1701)	6
Advanced Environmental Health (1303)	3
Special Topics in Environmen Health (1319)	ital 6
Special Topics in Physiologic Hygiene (1305)	al 4
Radiological Health (1306)	6
Occupational Toxicology and Disease (1304)	10
Clinical Subjects (1310)	5
Ergonomics (1315)	1
Industrial Hygiene (1313)	7
Industrial Hygiene Field Visits	7
Occupational Health Practices (1302)	10
Preventive Medicine Seminars (1802)	3
Seminars in Environmental He	ealth 30
Biology of work (1381)	10

Postgraduate Programs

Diploma in Industrial Health:

Offered to physicians wishing to enter the field of occupational health. The course is normally taken during one academic year but can be taken part time over two years. Seven students were enrolled in the D.I.H. course in 1976-77. For information about this course write to: Ms. Diana Alli, Office of Student Affairs, Faculty of Medicine, University of Toronto.

Master of Science: (Environmental Health)

Doctor of Philosophy: (Environmental Health)

Professional Masters Degree in Health Science:

It is hoped to begin offering this course in the fall of 1978. It will consist of a 2-year program divided into an environmental and an occupational health stream. Candidates would be physicians, nurses, engineers, chemists, biologists, etc. interested in a career in either occupational or environmental health. For information on the Masters and Doctoral programs write to School of Graduate Studies, University of Toronto.

Continuing Studies

The Environmental and Occupational Health Unit holds seminars, short courses and conferences. For example, during the past year a seminar was held on "Welding and Health", a refresher course was given on "Noise and the Community" and an international conference was held on "Occupational Health".

For information on similar activities in the coming year write to: The Director, Environmental and Occupational Health Unit, Room 305, Fitzgerald Building, Department of Preventive Medicine and Biostatistics, University of Toronto. M5S 1A1.

University of Western Ontario

Environmental Engineering Faculty of Engineering Science London, Ontario N6A 5B9

Contact

Prof. John Sullivan, Coordinator Environmental Engineering, (519) 679-3305

Objectives

Environmental Engineering is an option offered in the Faculty of Engineering Science at the graduate level. Its purpose is to provide teaching programs for professionals and conduct research in a variety of related fields such as urban pollution and occupational health and safety. Graduates of the program are prepared, mainly, for practice in governmental and industrial organizations.

Activities

The program is involved chiefly with professional manpower training at the graduate level. A group of instructors from the faculties of engineering, science, medicine and law and science are responsible for the curriculum which embraces a range of courses in the various disciplines. Courses are designed to provide professional engineers and scientists with knowledge not usually included in the standard programs of these disciplines. Students can emphasize a variety of areas of specialization including air and water pollution, noise, occupational safety and health. The faculty of engineering is expanding its teaching programs in occupational safety and health and has approved a new option which will place separate emphasis on this area.

Research

(See section 8 "Research Projects"))

Research proposals involving the faculties of engineering science and medicine are currently in preparation and it is hoped that suitable funding can be attracted for the proposals.

University of Windsor

Department of Industrial Engineering, Windsor, Ontario.

Contact

Dr. Abdul Raouf, Department Head (519) 253-4232, ext. 310

Activities

The Department teaches courses and conducts research in industrial engineering. Its research funds are obtained in the form of operating grants from the National Research Council and other governmental agencies.

Research

See Section 8 "Research projects".

York University

Centre for Research on Environmental Quality 4700 Keele Street, Downsview, Ontario M3J 2R3

Contact

Prof. Morris Katz, Faculty of Science Prof. W.J. Megaw, Physics and Chemistry (416) 667-3446

Objectives

To investigate chemical and physical properties and chemical and photochemical reactions of environmental pollutants and to isolate and identify toxic contaminants in air and water environments by trace analysis studies of biologic effects of chemical carcinogens and mutagens. To disseminate information on environmental quality to interested graduate students and staff of York University.

Activities

The Centre organizes seminars and discussions on environmental topics and provides reading room and library facilities to graduate students engaged in environmental studies.

Publications

Numerous publications on the analysis of polynuclear aromatic compounds.

Research

See Section 8 "Research projects".

American Industrial Hygiene Association (AIHA) (Southern Ontario Section)

Contact

N. Locington, Industrial Hygienist, c/o Dominion Foundries and Steel Ltd., Box 460, Terminal "A", Hamilton, Ontario, L8N 3H8 (416) 544-3761

or G.A. Saunders, c/o Imperial Oil Ltd., P.O. Box 4029, Terminal "A", Toronto, Ontario, M5W 1K3 (416) 446-4000

Objectives

To promote the study, evaluation and control of environmental stresses arising in or from the workplace or its products, in relation to the health or well-being of workers and the public.

To increase the knowledge of industrial and environmental health through interchange and dissemination of information and to bring together persons interested in the various aspects of industrial and environmental health.

To promote the profession through the encouragement of interest within and co-operation with governmental, industrial, educational and other professional bodies.

Canadian Association of Fire Chiefs

111-196 Bronson Avenue Ottawa, Ontario K1R 6H4

Contact

Emile Therien, Executive Director (613) 234-1510

Activities

The Association sets uniform standards, holds seminars and an annual conference.

Publications

Dialogue On the Line/Sur la Ligne

Canadian Chemical Producers' Association

Occupational Health Committee Suite 505, 350 Sparks Street Ottawa, Ontario K1R 7S8

Contact

W.L. Canniff, Technical Director of the Association and Secretary of the Occupational Health Committee (613) 237-6215

Objectives

The Occupational Health Committee keeps Association members informed about occupational health matters of particular concern to the chemical industry.

Activities

The Committee prepares briefs or responses to regulations and/or legislation of the federal and provincial governments in occupational health, industrial hygiene or toxicology. It also establishes and maintains liaison with other associations with similar areas of interest and concern and sponsors seminars or workshops on occupational health, industrial hygiene, etc.

Occupational Health Committee Membership

Dr. W.J. Martin (Chairman) Medical Director Cyanamid of Canada Limited P.O. Box 240 Niagara Falls, Ontario L2E 6T4 (416) 356-9000

V.A. Barker, Occupational Hygienist Gulf Oil Canada Limited 800 Bay Street Toronto, Ontario M5S 1Y8 (416) 924-4141 Ext. 281

W.L. Bongard Director, Manufacturing Services Allied Chemical Canada Ltd. P.O. Box 2000 Amherstburg, Ontario N9V 2Z6 (519) 736-2111 Dr. L.E. Cassidy Chief Medical Officer Canadian Industries Limited P.O. Box 10 Montreal, Quebec H3C 2R3 (514) 874-3686

P.M. Dellasciucca Safety & Loss Prevention Manager Monsanto Canada Limited 425 St. Patrick Street LaSalle, Quebec H8N 2H3 (514) 336-4850 Loc. 321

R.R. Doyle Director of Employee & Public Relations BASF Canada Limited 5850 Cote de Liesse Road Montreal, Quebec H4L 4V8 (514) 341-5411

Dr. J.E. Drouin Corporate Medical Officer ERCO Industries Limited Buckingham, Quebec J8L 2X2 (819) 986-3366 Loc. 233

Dr. J.D. Easton Technical Director REED, Pigments Division 199 New Toronto Street Toronto, Ontario M8V 2E9 (416) 251-3781

R.J. Fliegl Advisor, Industrial Hygiene Shell Canada Limited P.O. Box 400, Terminal "A" Toronto, Ontario M5W 1E1 (416) 597-7042

F.M. Hager Development Manager Uniroyal Chemical Erb Street Elmira, Ontario N3B 3A3 (519) 669-5466 R.E. Healey
Manager—Environmental Health &
Safety
B.F. Goodrich Canada Ltd.
409 Weber St. West
Kitchener, Ontario
N2G 4J5
(519) 742-3641

J.H. Johnston Manager, Industrial Hygiene Div. Imperial Oil Limited 111 St. Clair Ave. West Toronto, Ontario M5W 1K3 (416) 924-9111 Loc. 2104

D.J. McCracken Manager, Risk Control Division Polysar Limited Vidal Street S. Sarnia, Ontario N7T 7M2 (519) 337-8251 Loc. 8310

Dr. A.H. Moyle Medical Director DuPont of Canada Limited P.O. Box 660 Montreal, Quebec H3C 2V1 (514) 861-3861 Loc. 181

Dr. O.P. Mukheja Industrial Hygienist Union Carbide Canada Limited 123 Eglinton Ave. E. Toronto, Ontario M4P 1J3 (416) 487-1311, Loc. 1320

N. Murray Industrial Hygienist Dow Chemical of Canada Limited P.O. Box 3030 Sarnia, Ontario N7T 7M1 (519) 339-3233

J.H. Shirriff
Plant Manager
Ethyl Corporation of Canada
Corunna, Ontario
NON 1G0
(519) 862-1411

Canadian Council of Occupational Medicine (Affiliate of the Canadian Medical Association)

Contact

Dr. A.W. Karr, Secretary-Treasurer c/o Ford Motor Company P.O. Box 1300 Oakville, Ontario L6J 5C9

Objectives

- Provide a strong Canadian voice in occupational medicine, represent the rights of the occupational physician and stimulate the formation and development of provincial occupational medicine organizations.
- Provide a forum for discussion of occupational medicine.
- Generate and maintain high standards in the field.
- Promote the standardization of norms and health guidelines in industry.

Activities

The Council has committees on education, research, publications and public policy. It is an affiliate of the Canadian Medical Association and acts as an advisor to the association. Funds are provided by provincial occupational medicine organizations.

Research

The Council is currently reviewing suitable research projects and it is providing advisory services to other organizations conducting research in occupational health.

Publications

Guiding Principles for the provision of occupational health services (under revision).

Canadian Manufacturers' Association (Ontario Division)

1 Yonge Street Toronto, Ontario M5E 1J9

Contact

Douglas Keen, Manager Ontario Division (416) 363-7261

Objectives

To undertake studies of manufacturers' problems and opportunities; to present the views of the manufacturing sector to government and to provide members with information services essential to their day-to-day operations.

Activities

The Association advises members of legislative and other developments in many areas including occupational health and safety and represents the interests of member companies. The CMA maintains a roster of resource persons on the working environment to provide assistance on a wide range of occupational health and safety matters.

Canadian Rehabilitation Council For The Disabled

1 Yonge Street Suite 2110 Toronto, Ontario M5E 1E8

Contact

David White, Director of Information Services (416) 862-0340

Objectives

The Council is a national federation of voluntary organizations concerned with and committed to helping the physically disabled. The prime concerns of CRCD are the co-ordination of medical, social, vocational and educational rehabilitation services. It is interested in the quantity and quality of services available to the physically disabled, both adults and children, and the status of the physically disabled in society.

Publications

Rehabilitation Digest
Declaration of Intent
Rehabilitation—A Career for You.
The Council also has a film library.

Canadian Society of Safety Engineering Inc.

P.O. Box 3042 Station C Hamilton, Ontario L8H 7J3

Contact

Fred Menet, Secretary (416) 547-1019

Objectives

Safety promotion

Activities

Members sit on various CSA subcommittees and steering committees. The Society sponsors an annual safety seminar and assisted in the formation of the Canadian Registered Safety Personnel Association.

Publications

Bi-monthly newsletter and a bi-monthly article in the journal, Canadian Occupational Safety.

Canadian Welding Society

6 Milvan Drive Weston, Ontario M9L 1Z2

Contact

P.W. Remington, Executive Director (416) 745-9360

Activities

The Society has 15 chapters in Canada, six of which are in Ontario. Aided by the national office, they hold monthly technical or safety meetings and plant tours. When necessary, one or two-day seminars are organized to study specific subjects of interest in the particular area. The national office disseminates information on welding developments from around the world through the publication of papers, direct mail, lectures, conferences, seminars and exhibits. The Society also publishes textbooks and offers correspondence courses on welding.

The Technical Activities Committee of the Society includes scientists and institutions where research is conducted into welding, welding metallurgy, or welding technology. Committee members attempt to establish welding research needs, set priorities and present briefs or proposals to federal authorities for funding of recommended research projects.

Publications

Information on the Society is published in the independent magazine, The Canadian Welder and Fabricator. The Society distributes publications of foreign welding societies and institutes.

Fire Prevention Canada

111-196 Bronson Avenue Ottawa, Ontario K1R 6H4

Contact

Emile Therien, Executive Director (613) 234-1586

Objectives

The association (FIPRECAN) is a national public service organization which develops and publishes fire prevention information material and related media services.

Publications

Annual public report and a catalogue of fire prevention materials.

John A. Fletcher and Associates Limited

Loss Control Consultants P.O. Box 1085, Station B Rexdale, Ontario M9V 2B3

Contact

John A. Fletcher (416) 675-6070

Objectives

John A. Fletcher and Associates Limited, Loss Control Consultants, is a private consulting firm servicing clients, primarily in Canada, in the area of Total Loss Control Programming.

Activities

Consulting services offered include

- Preliminary discussions with staff personnel reviewing current programming, statistics and needs.
- Orientation seminar for senior management personnel.
- Assisting and training of selected personnel in the development of a Loss Analysis Survey indicating preventable losses.

The company has established the Total Loss Control Training Institute offering specialized training in all aspects of Total Loss Control Programming. All courses have a single objective. To develop practical methods of establishing and implementing a successful Total Loss Control Program, On successful completion of Institute courses, students receive a Certificate. The five-day Total Loss Control course is a credit course for which the students receive credit towards the necessary requirements of the Diploma in Safety Technology granted by Humber College of Applied Arts and Technology, (A written examination and project are required for college credits.)

Courses

TLC/01

Total Loss Control (credit course).

A five-day course on completion of which the participants should be able to demonstrate an in-depth knowledge of the concept and techniques of Total Loss Control.

TLC/02

Inspection and Investigation Techniques.

A two-day course for supervisory personnel in methods of investigation and inspection.

TLC/04

Total Loss Control for the Supervisor. A two-day course to assist supervisory personnel in the implementation of their Total Loss Control Program.

TLC/05

Developing Uninsured Costs. A one-day course to show management personnel how to develop uninsured costs (in-plant only).

TI C/06

Profiling for Profit Improvement. A one-day course to develop a comprehensive profile which will cover all areas of Program deficiencies and Programmer effectiveness (in-plant only).

TLC/07

People in Business, Industry and Government.

A four-day course allowing for a maximum of practical discussion in the vital areas of management. Topics to be discussed include: authorities and responsibilities, leadership, communications,

directing, controlling, human relations, attitudes, motivation, personality, stress, and applying the principles (in-plant only).

TLC/08

Occupational Health Nurse Workshop. A two-day workshop to present and to discuss the role of the Occupational Health Nurse in a company safety and loss control program.

TLC/10

Occupational Health and Safety Committees.

A two-day course for personnel involved with on-site health and safety committees to present the scope and functions of such committees.

Other Programs

Five Unit, "Do-it-yourself" Modular Program for the Forest Industry

Five Unit, "Do-it-yourself" Modular Program for the Farming Community

Publications

Total Environmental Control by John A. Fletcher and Hugh M. Douglas, Hardcover, 162 pages, 1970 The Industrial Environment by John A. Fletcher, CSP, paperback, 127 pages, 1972

L'Environnement Industriel by John A. Fletcher, CSP, paperback, 151 pages, 1974

The People Environment by John A. Fletcher, CSP, hardcover, 127 pages, 1974

Profiling a Total Loss Control Program/ Programmer by John A. Fletcher and Hugh M. Doug-

las, booklet, 31 pages, 1970

Effective Loss Prevention by M. Joan Crowe and Hugh M. Douglas, paperback, 237 pages, 1976

Damage Control by Frank E. Bird, Jr. and George L. Germaine, paperback, 176 pages, 1966

Mining Industry Research Organization Of Canada

Suite 3310, Commerce Court West P.O. Box 243 Toronto, Ontario M5L 1E8

Contact

R.D. Lord, Research Director (613) 862-1417

Objectives

Plan and manage research projects approved by the organization's board of directors who represent supporting member mining companies.

Activities

As research projects are identified, the organization (MIROC) seeks a research facility with the required expertise and awards a contract. It supports research with its own funds or with the assistance of government and other sources as available.

MIROC's 1977 budget is about \$250,000. Current research projects cover development of new working gear for underground miners, featuring new concepts in lighting, respiratory and noise protection and work clothing. MIROC welcomes suggestions for projects that may improve the work environment and overall productivity and where the application of technology might result in such improvements.

Publications

Progress on product development.

Petroleum Association For Conservation Of The Canadian Environment

Occupational Health Committee Suite 406 130 Albert Street Ottawa, Ontario

Contact

Dr. J. Lovering, Medical Director, Gulf Oil Canada Limited Chairman

V. Barker, Occupational Hygienist, Gulf Oil Canada Limited Ass't Chairman (416) 924-4141

Objectives

The committee is dedicated to an improved workplace in the Petroleum industry through the promotion of occupational health. It is composed of industrial hygienists, industrial physicians and others with corporate responsibility for occupational health.

Activities

The committee collects and disseminates occupational health information for member companies; reviews and comments on legislation and keeps abreast of occupational health developments.

Federally Supported Re	search at Ontario Universities	
Atomic Energy Control Boa	rd	
University	Project	Total Amount of Grant
McMaster	Reactor Operation and Reactor Fuel	\$ 252,600
Queen's	Nuclear Structure Studies Research at TRIUMF	6,000
Toronto	Nuclear Studies Using Electrostatic Accelerators Neutron Source SLOWPOKE Nuclear Reactor Research SLOWPOKE II Nuclear Reactor	30,000 36,300 20,000 158,000
Medical Research Council		
Contractee	Project	Total Amount of Grant
Pengelly, L.D. Medicine, McMaster MRC 0932	Effect of Mechanical Loads on the breathing of man	\$ 6,666
Department of National Hea	alth and Welfare (Health)	
Contractee		
Brown, J.R. Sch. Hyg. Toronto NHWH0028	Study of toxicity of industrial dust (Silica flour)	4,571
Brown, J.R. Environ. Stud., Tor., NHWH0029	The effect of temperature on indicators of human fecal contamination in water	14,552
Gent, M. Medicine, McMaster NHWH0082	Clinical epidemiology—health care research and training centre	152.903
Jervis, R.E. Chem. Eng. Tor. NHWH0107	Nuclear activation studies on environmental and public health problems	18,387
Miller, A.F. Prev. Med. Tor. NYWH0166	Epidemiology, study of bladder cancer	7,113
Morgan, R.W. Prev. Med. Tor. NHWH170	Genetic and epidemiological investigation of breast cancer	8,585
Pengelly L.D. Med. McMaster NHWH0182	Relationship between bronchial reactivity and response to air pollutants in man	12,425
Schewchun, J. Eng. Phy. McMaster NHWH0213	Detection and mapping of gaseous pollutants for epidemiology studies on the respiratory health of urban communities using lesser techniques	52,727

Res. Tor. NHWH0214 Teare, F.W. Pharm. Tor. Some hepatic microsomal drug-metabolizing enzymes National Research Council of Canada Contractee Project Total Amoord Gramman and Deliver Structures Project Total Amoord Gramman and Deliver Structures Project Total Amoord Gramman and Deliver Structures Project Trace Analysis of Polycyclic Quinones and other Oxidation Products of Polynuclear Aromatic Hydrocarbons Facts. Morris Pork Univ. Products of Polynuclear Aromatic Hydrocarbons Profund and related Carcinogenic Environmental Pollutants Racuf, Abdul Worker limitations for performance tasks involving Psychomotor skills and decision making Supply and Service Canada Contractee Project Total Amoord Gramman Aromatic Hydrocarbons Feasibility study of an acoustic protection device to reduce noise-induced hearing loss. On behalf of DND SSC 0242 Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects was about \$4,500. Recent and current projects underway are: Contractee Project Drown, Dr. John Back injuries Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Guelph Variations in time, psychological and physiological			
Res. Tor. NHWH0214 Teare, F.W. The effect of certain environmental pollutants on some hepatic microsomal drug-metabolizing enzymes National Research Council of Canada Contractee Project Total Amo of Gr Burnett, E.F.P. 1) Limit design of concrete structures Civ. Eng., Waterloo 2) Abnormal loadings and building safety NRC 0694 Katz, Morris York Univ. Products of Polyvyclic Quinones and other Oxidation Products of Polynuclear Aromatic Hydrocarbons Ratz, Morris Alamoris Andrelated Carcinogenic Environmental Pollutants Raouf, Abdul Worker limitations for performance tasks involving Driv. of Windsor Supply and Service Canada Contractee Project Total Amo of Gr Searce, C. Feasibility study of an acoustic protection device to reduce noise-induced hearing loss. On behalf of DND SSC 0242 Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past tew years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Prown, Dr. John Back Injuries Univ. of Guelph Qualification of Safety Professional Univ. of Guelph Qualification of Safety Professional Univ. of Guelph Variations in time, psychological and physiological	Contractee		
National Research Council of Canada Contractee Project Total Amodof Gr. Search, Waterloo 2) Abnormal loadings and building safety NRC 0694 Katz, Morris Trace Analysis of Polycyclic Quinones and other Oxidation Profucts of Polynuclear Aromatic Hydrocarbons Katz, Morris Biological effects of Polynuclear Aromatic Hydrocarbons 85.2 York Univ. Products of Polynuclear Aromatic Hydrocarbons and related Carcinogenic Environmental Pollutants Raouf, Abdul Worker limitations for performance tasks involving psychomotor skills and decision making Supply and Service Canada Contractee Project Total Amodof Gr. Searle, C. Feasibility study of an acoustic protection device to reduce noise-induced hearing loss. On behalf of DND Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Sidlofsky, Dr. Sam Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Tor. Saugut Pr. Abdul Variations in time, psychological and physiological	Res. Tor.	Effects of air pollutants on pulmonary function of normal persons and asthmatics	36,917
Contractee Project Total Amood Gr. Burnett, E.F.P. 1) Limit design of concrete structures \$\ 10.0 \text{ of Gr. Eng., Waterloo} \text{ 2) Abnormal loadings and building safety} \$\ 10.0 \text{ of Civ. Eng., Waterloo} \text{ 2) Abnormal loadings and building safety} \$\ 10.0 \text{ of Polynuclear Aromatic Hydrocarbons} \text{ of Polynuclear Aromatic Hydrocarbons} \text{ 10.00 York Univ.} \text{ Products of Polynuclear Aromatic Hydrocarbons} \text{ and related Carcinogenic Environmental Pollutants} \$\ 85.2 \text{ of Winksor} \text{ Worker limitations for performance tasks involving psychomotor skills and decision making} \$\ \text{ Univ. of Windsor} \text{ Project} \text{ Total Amood Gr. Feasibility study of an acoustic protection device to reduce noise-induced hearing loss. On behalf of DND \$\ 3.1 \text{ of Gr. Searle, C. Elec. Eng. Queen's reduce noise-induced hearing loss. On behalf of DND \$\ 3.1 \text{ of DND } of Searle of Contractee Projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Back injuries Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Tor. Paper T. Abdul Variations in time, psychological and physiological	Pharm. Tor.	The effect of certain environmental pollutants on some hepatic microsomal drug-metabolizing enzymes	17,444
Burnett, E.F.P. Civ. Eng., Waterloo NRC 0694 1) Limit design of concrete structures 2) Abnormal loadings and building safety NRC 0694 Katz, Morris Trace Analysis of Polycyclic Quinones and other Oxidation Products of Polynuclear Aromatic Hydrocarbons Biological effects of Polynuclear Aromatic Hydrocarbons and related Carcinogenic Environmental Pollutants Raouf, Abdul Univ. of Windsor Worker limitations for performance tasks involving psychomotor skills and decision making Supply and Service Canada Contractee Project Total Amo of Gr Searle, C. Elec. Eng. Queen's SSC 0242 Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Guelph Variations in time, psychological and physiological	National Research Council of	Canada	
Burnett, E.F.P. Civ. Eng., Waterloo (2) Abnormal loadings and building safety NRC 0694 Katz, Morris Trace Analysis of Polycyclic Quinones and other Oxidation Products of Polynuclear Aromatic Hydrocarbons Katz, Morris Katz, Morris Biological effects of Polynuclear Aromatic Hydrocarbons Katz, Morris Raouf, Abdul Univ. Worker limitations for performance tasks involving psychomotor skills and decision making Supply and Service Canada Contractee Project Total Amo of Gr Searle, C. Elec. Eng. Queen's SSC 0242 Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Univ. of Tor. Sidlofsky, Dr. Sam Univ. of Guelph Variations in time, psychological and physiological	Contractee	Project	Total Amount of Grant
York Univ. Products of Polynuclear Aromatic Hydrocarbons Katz, Morris York Univ. Biological effects of Polynuclear Aromatic Hydrocarbons and related Carcinogenic Environmental Pollutants Raouf, Abdul Univ. of Windsor Worker limitations for performance tasks involving psychomotor skills and decision making Supply and Service Canada Contractee Project Total Amoof Gr Searle, C. Elec. Eng. Queen's Feasibility study of an acoustic protection device to reduce noise-induced hearing loss. On behalf of DND Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Univ. of Tor. Sidlofsky, Dr. Sam Univ. of Guelph Variations in time, psychological and physiological	Civ. Eng., Waterloo		\$ 10,000
York Univ. and related Carcinogenic Environmental Poliutants Raouf, Abdul Univ. of Windsor Worker limitations for performance tasks involving psychomotor skills and decision making Supply and Service Canada Contractee Project Total Amo of Gr. Searle, C. Elec. Eng. Queen's reduce noise-induced hearing loss. On behalf of DND Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Univ. of Tor. Sidlofsky, Dr. Sam Univ. of Guelph Variations in time, psychological and physiological			10,000
Supply and Service Canada Contractee Project Total Amo of Gr Searle, C. Feasibility study of an acoustic protection device to reduce noise-induced hearing loss. On behalf of DND Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Back injuries Qualification of Safety Professional Univ. of Tor. Baouf Dr. Abdul Variations in time, psychological and physiological			85,262
Contractee Project Feasibility study of an acoustic protection device to Elec. Eng. Queen's reduce noise-induced hearing loss. On behalf of DND Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Univ. of Tor. Sidlofsky, Dr. Sam Univ. of Guelph Pacual Dr. Abdult Variations in time, psychological and physiological			
Searle, C. Elec. Eng. Queen's reduce noise-induced hearing loss. On behalf of DND SSC 0242 Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Back injuries Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Guelph Raouf Dr. Abdul Variations in time, psychological and physiological	Supply and Service Canada		
Provincially Sponsored Research Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Back injuries Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Guelph Raouf Dr. Abdul Variations in time, psychological and physiological	Contractee	Project	Total Amount of Grant
Ministry of Labour The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Back injuries Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Guelph Pagust Dr. Abdul Variations in time, psychological and physiological	Elec. Eng. Queen's		\$ 3,100
The Labour Safety Council has sponsored a number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Back injuries Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Guelph Raouf Dr. Abdul Variations in time, psychological and physiological	Provincially Sponsored Re	esearch	
number of research projects over the past few years. The budget for 1976-77 was about \$4,500. Recent and current projects underway are: Contractee Project Brown, Dr. John Back injuries Univ. of Tor. Sidlofsky, Dr. Sam Qualification of Safety Professional Univ. of Guelph Variations in time, psychological and physiological	Ministry of Labour		
Brown, Dr. John Univ. of Tor. Sidlofsky, Dr. Sam Univ. of Guelph Raouf Dr. Abdul Variations in time, psychological and physiological	number of research projects over t The budget for 1976-77 was about	he past few years. t \$4,500.	
Univ. of Tor. Sidlofsky, Dr. Sam Univ. of Guelph Qualification of Safety Professional Univ. of Guelph Variations in time, psychological and physiological	Contractee	Project	
Univ. of Guelph Variations in time, psychological and physiological		Back injuries	
Raouf, Dr. Abdul Variations in time, psychological and physiological		Qualification of Safety Professional	
Univ. of Windsor measures of a worker over an 8 hour period	Raouf, Dr. Abdul Univ. of Windsor	Variations in time, psychological and physiological measures of a worker over an 8 hour period	
D.G. Bragg Study on engineering control of asbestos Univ. of Waterloo		Study on engineering control of asbestos	

In 1975, the Board financed the following	research:	
Contractee	Project	Total Amoun
Alberti, Dr. Peter Chief of Otolaryngology at Mount Sinai Hospital, Toronto, and Associate Professor of Surgery at University of Toronto	Occupational Hearing Loss	(partial funding)
Harris, Dr. W.R. Associate Professor of Orthopaedic Surgery, University of Toron and Dr. Cecil Rorabeck of Toronto General Hospital, conducted at the Board's Hospital and Rehabilitation Centre, and completed in 1975	Brachian Plexus Nerve Injuries to,	(full funding
Wiley, Dr. Murray and Poplawski, Z.J. At Toronto Western Hospital and The Board's Hospital and Rehabilitation Centre	Sudek's Dystrophy (a painful limb disease)	(full funding
Jackson, Dr. Robert at Toronto General Hospital	Phase two of research at the Knee Evaluation Clinic	(full funding
Macnab, Dr. Ian with McIvor, Dr. Graeme	Research into methods of assessing the post-operative disc and spinal cord by a special X-ray technique (transfemoral, lumbar Phlebography).	
Ministry of the Environment		
Contractee	Project	Total Amoun of Grant
Katz, Morris, York Univ.	Atmospheric Reactions of Polynuclear Aromatic Hydrocarbons	\$ 20,905
Other		
Contractee	Project	Total Amoun of Grant
Queen's Univ. Dept. of Community Health and Epide- miology	1) Use of health hazard appraisal as a vehicle for health education in a factory work force. 2) An attempt to define precursors of early noise—induced hearing loss.	\$
Univ. of Western Ontario Engineering Science Sullivan, J.L.	Laser Studies of Atmospheric Particulates	6,500 per yr

Medical Laboratories

The medical laboratories perform all or some of the following types of tests:

Biochemistry Radioassavs Hematology **Blood Bank Immunology** Microbiology **Anatomic Pathology** Hystology and Cytology

A list of about 300 tests performed by medical laboratories and their fees, is published by the Ontario Medical Association.

Hospital and Private Licensed Laboratories

Contact

Dr. D.S. Willoughby, Director, Laboratory Services Branch. Resources Road. Islington, Ontario, (416) 968-3161

P.J. Plant, Acting Director, Inspection Branch, Ministry of Health, 880 Bay Street, 6th Floor, Toronto, Ontario, (416) 965-5083

P.J. Plant, Chief, Laboratory & Specimen Collection Centre Inspection Service, 880 Bay Street, 6th Floor, Toronto, Ontario, (416) 965-4063

Ministry of Health, **Central Laboratories**

Contact

H.B. Smith, Director, Resources Road. Islington, Ontario. (416) 968-3163

Ministry of Health. Regional Public Health Laboratories

Contact

Hamilton-Dr. E.A. Belle (416) 385-5379 Kingston-Dr. M.V. O'Shaughnessy (613) 546-2686 London-Dr. R.S. Maharajah (519) 455-9310 Orillia-N.C. Irvine (705) 325-7449 Ottawa-Dr. C.J. Christie (613) 828-2442 Palmerston-H.D.C. Mallory (519) 343-2015 Peterborough—J.S. Thompson (705) 743-6811 Sault Ste. Marie—A.G. Harbour (705) 254-7132

Thunder Bav-L.G. Heald (807) 622-6449 Timmins—F.E. Cahoon (705) 264-8771 Windsor-Miss A. Prvtula (519) 969-4341

Sudbury-Mrs. C. Gagnon

(705) 522-2640

Environmental Laboratories

1. Government

Federal

D.C.I.E.M. (National Defence)

Contact:

Dr. C. Yelland, 1133 Sheppard Avenue West, P.O. Box 2000. Downsview, Ontario, M3M 3B9 (416) 633-4240

Energy. Mines and Resources

Contact:

Dr. R. Tervo, CANMET. Mining Research Laboratories. Elliot Lake Laboratory, Box 100. Elliot Lake, Ontario, P5A 2J6 (705) 848-2236

Mr. J. Bossert. Canadian Explosive Atmospheres Labs.. 555 Booth St., Ottawa, Ontario, K1A 0G1. (613) 996-4570

National Health and Welfare

Contact:

R. Mercier, Health Protection Branch, Tunney's Pasture, Ottawa, Ontario, K1A OL2 (613) 996-7170

Regional Office. 2301 Midland Avenue. Scarborough, Ontario, M1P 4P7

Provincial

Ministry of Labour: Occupational Health Branch

Contact:

H. Wall, Officer in Charge, 360 Christie Street, Toronto, Ontario, (416) 965-7925

Ministry of Labour: Mining Health and Safety

Contact:

Mr. Ken Bee, Whitney Block, Queen's Park, Toronto, Ontario, (416) 965-1328

Ministry of Environment

Contact:

G. Ronan, Director, Laboratory Services Branch, Resources Road, Islington, Ontario, (416) 248-3001

Contact:

G. Quance, Administrative Services Section, Laboratory Services Branch, Resources Road, Islington, Ontario, (416) 248-3015

Ministry of Natural Resources

Contact:

Dr. A.E. Pitts, Chief Analyst, Mineral Research Branch, 11th Floor, 77 Grenville St., Toronto, Ontario, M5S 1B3 (416) 965-1337

2. Private and Consultants

Beck Consultants Limited, 6870 Goreway Drive, Mississauga, Ontario, L4V 1L9

Contact:

John Sliwinski, Director, A.J. Chandler, P. Eng., Project Engineer, (416) 671-2600

Bio-Research Laboratories Ltd., 265 Hymus Blvd., Pointe Claire, Quebec, H9R 1G6

Contact:

G. Marier, D. Sc., Vice-President, (514) 697-1790

Caleb Brett Canada Ltd., 55 Unwin Avenue, Toronto, Ontario, M5A 1A2

Contact:

Harry M. Webb, Ph.D., Chief Chemist, (416) 461-1365

Campro,

2465 Cawthra Road, Mississauga, Ontario, L5A 3P2

Contact:

L.L. Diosady, Ph.D., P. Eng., Director, Research and Development,

(416) 272-1400

Cardinal Biologicals Ltd., 168 Wicksteed Avenue, Toronto, Ontario, M4G 2B6

Contact:

W. Hullah. (416) 423-8948,

Chemsearch Laboratories Ltd., 727 King St. W., Toronto, Ontario, M5V 1M9 Contact:

P. Arora, Ph.D. (416) 368-7708

Dearborn Chemical Co. Ltd., P.O. Box 3060, Station "A", Mississauga, Ontario, L5A 3T5

Contact

Dr. Igor Marvan, (416) 279-2222

J.T. Donald & Co. Limited, 35 Crockford Blvd., Scarborough, Ont.

Contact:

G. Auld, M.C.I.C. (416) 751-5230

Enviroclean Limited, 320 Adelaide Street W., London, Ontario, N5Z 3L 2

Contact:

R. Whitehead, Ph.D., Manager, Laboratory Services, (519) 432-7558

Envirocon (Eastern) Ltd., P.O. Box 1339, Station "B" Downsview, Ontario, M3H 5W3

Contact:

John Trought, (416) 661-1350

Industrial Laboratories of Canada, 95 Townline Rd., P.O. Box 7, Tillsonburg, Ontario, N4G 4H3 Contact: (519) 842-4781

James F. MacLaren Ltd., (write c/o Enviroclean Limited)

Micro-Technics Limited, 2000 Ellesmere Rd., Unit 16, Scarborough, Ontario, M1H 2W4 Contact: R.J. Redhead, B.Sc., Vice President, Gen. Mgr.,

(416) 438-6727

Ontario Research Foundation, 2395 Speakman Drive, Sheridan Park, Mississauga, Ontario, L5K 1B3

Contact:

S.C. Barton, Ph.D., Principal Scientist, Dept. of Environmental Chemistry, (416) 822-4111

Respiratory Services Limited, 170 St. George St., Suite 607, Toronto, Ontario Contact: E.S. Lilker, M.D., F.R.C.P.(C) (416) 920-2142

Standard Biological Laboratories, 514-516 Lakeshore Rd. E., Mississauga, Ontario, L5G 1J3

Contact:

D. Sturch, (416) 274-2531

Technical Service Laboratories, 1301 Fewster Dr., Mississauga, Ontario, L4W 1A2

Contact:

W.H. Grondin, (416) 625-1544

Widmer Chemical Laboratories, 333 King St. W., Toronto, Ontario Contact: (416) 363-1864

3.Companies

B.F. Goodrich Canada Ltd., Kitchener, Ontario, N2G 4J5

Contact:

R.E. Healey, (519) 742-3641

Canadian Industries Limited, Paint Research Laboratory, 1330 Castlefield Avenue, Toronto, Ont., M6B 4B3

Contact:

G.W. Barnett, Tech. Mgr., Paints,

Dow Chemical of Canada Ltd., South Vidal St., P.O. Box 3030, Sarnia, Ont., N7T 7M1

Contact:

N. Murray, Industrial Hygiene Supervisor,

Gulf Oil Canada Limited, P.O. Box 460, Station "A", Toronto, Ontario, M5W 1E5

Contact: V.A. Barker.

Occupational Hygienist, (416) 924-4141

Ontario Hydro, 800 Kipling Avenue, Toronto, Ontario, M8Z 5S4

Contact:

J.G. Hardy, (416) 231-4111

Uniroyal Ltd.,
Research Laboratories,
120 Huron St.,
Guelph, Ontario.
Contact:
Earlby E.J. Wakefield, P. Eng.,
Senior Group Leader,
Environmental Services,
(519) 822-3790

4. Universities

Occupational Health Program McMaster University, 1200 Main St. W., Hamilton, Ont., L8S 4J9

Contact:

Kenneth C. Charron, M.D., LL.D.

Department of Community Health, Queen's University, Kingston, Ont. Contact:

Contact:

Dr. R. Lees

Dept. of Preventive Medicine and Biostatistics, Faculty of Medicine, University of Toronto.

Contact: Dr. G.J. Stopps

University of Waterloo, Department of Chemistry, Waterloo, Ontario.

Contact:

Professor F. Karasek

York University, Faculty of Science, 4700 Keele St., Downsview, Ontario, M3J 1P3

Contact:

Morris Katz, Ph.D., D. Sc.

Radiation Laboratories Government

Federal

Energy, Mines and Resources

Contact:

Dr. R. Tervo, CANMET, Mining Research Labs., Elliot Lake Laboratory, Box 100, Elliot Lake, Ontario, P5A 2J6 (705) 848-2236

Provincial

Radiation Emitting Devices Tests

Contact:

Dr. J.H. Aitken, Chief, Health Physics Service, 15 Overlea Blvd., 5th Floor, Toronto, Ontario, (416) 965-8178

Radiochemical Analysis

Contact:

T. Tai-Pow, Chief, Radiation Protection Laboratory, 360 Christie Street, Toronto, Ontario, (416) 965-2201

Information on type of tests performed by the various Medical, Environmental and Radiation laboratories is presented in Tables I and II.

Table I							
Medical, Environmental a	and Radiatio	n Laborato	ries				
Type of Laboratory	No. of Laboratories	Type of Tests					Comments and Information
l Medical Laboratories:		The Medica some of the	l laboratorie following ty			or	485 laboratories are certified by M.O.H.
Licensed Private & Hospital	485	Biochemist Radioassay Hematology Blood Bank Immunology Microbiology Anatomic P Hystology a	rs / / / /	/		all te	najor laboratories could do almos ests; the rest could be referred to ble laboratories
Central Laboratories,	1						could do almost all tests
Regional Public Health, Ministry of Health	12						would do almost all tests
Type of Laboratory	No. of Laboratories	Type of Tests Biological: chemicals in blood, urine, others	Air Sampling: gases, vapours, particulates	solids	liquids	noise	Comments and Information
II Environmental Laboratories							
Federal Government:							
DCIEM (National Defence)		no	yes	yes	yes	yes	
Energy, Mines and Resources		no	yes	no	no	yes	testing of fumes from underground explosives radiation testing (radon & daughters)
National Health and Welfare	е	no	yes	yes	yes	no	
Provincial Government:	***************************************						
Ministry of Labour							
Occupational health Mines	1	yes	yes yes	yes yes*	yes	no	*rope testing
Ministry of Environment	4 service sections	yes	yes	yes	yes	yes	
Ministry of Natural Resources							
Ontario Hydro (see Companies in Table I)							
Total	6						

Provincial Government

Private Laboratories and Consultants							
Ontario Research Found.	1	yes	yes	yes	yes	yes	
Bio-Research Laboratories	1	yes	no	yes	yes	no	
Campro Mississauga Timmins	2	yes	yes	yes	yes	yes	
Cardinal Biological Ltd.		no	no	yes	yes	no	
Caleb Brett Canada Ltd.	1	lead	no	yes	yes	no	(testing facilities in England through Environmental Analysis Ltd.)
Chemsearch	1	yes	yes	yes	yes	no	
Dearborn Chemicals		yes	yes	yes	yes	no	
Donald Toronto Hamilton St. Catharines Sudbury	4	lead	some	yes	yes	no	
Micro-Technics Ltd.	1	yes	yes	yes	yes	no	
Standard Biological Labs.	1	yes	no	yes	yes	no	
Technical Services Labs.	1	yes	yes	yes	yes	yes	
Technological Advisory Services (Chem Search)	1	yes	yes	yes	yes	no	Organic and biochemical analytical capabilities, including electron microscopy for asbestos
Beck Consultants	1	no	yes	yes	yes	yes	
Envirochem Ltd. Willowdale London	2	yes	yes	yes	yes	no	
Envirocon (Eastern)							
James F. MacLaren Ltd. Windsor Waterloo Ottawa	3	yes	yes	yes	yes	no	

Private Labs. cont'd.							
Industrial Laboratories	1	yes	no	yes	yes	no	
Underwriters Laboratories	1	no	no	no	no	no	Examination, testing and classification of devices, material, etc., to life, fire and other hazards
Widmer Chemical Labs.	1	yes	yes	yes .	yes	no	
Respiratory Services Ltd.	1	some	no	no	no	no	
Company Laboratories							
B.F. Goodrich (Canada) Ltd. Kitchener, Ont.		yes	yes	no	yes	no	
C.I.L.	1	no	yes	yes	yes	no	Cannot provide services to outside sources
Dow Chemical of Canada Ltd	l.	yes	yes	yes	yes	yes	
Gulf Oil Canada Ltd.	1	no	yes	no	no	no	
Uniroyal Ltd.	1	no	yes	yes	yes	yes	Interested in providing services to others on a fee basis.
Ontario Hydro		no	yes	yes	yes	no	
University Laboratories							
York University	1	no	yes	no	yes	no	Analysis of organic carcinogens including coke oven emissions
University of Waterloo	1	no	yes	no	yes	no	
University of Toronto	1	yes	yes	yes	yes	yes	Including radiation tests and asbestos by electron microscopy
McMaster University	1	yes	yes	yes	yes	no	Analysis of organic carcinogens including PCB's

Type of Laboratory	No. of Laboratories	Test for Rad Biological	ioactivity Conte	ent Soil	Comments and Information
III Radiation Laboratories					
Radiochemical Analysis					
Health and Welfare Canada Ottawa	a, 1	yes	yes	yes	Measurement of biological and environmental samples from all across Canada
Ontario Ministry of Labour	1	yes	yes	yes	Biological and environmental samples from the working and public areas.
Ontario Hydro	3	yes	yes	yes	at each of the three nuclear power sites in Ontario. Monitoring radiological con- ditions inside the plants and biological samples.
Eldorado Nuclear Ltd.	1	yes	yes	yes	capabilities in the same areas as Ontario Hydro.
Atomic Energy of Canada Ltd.	1	yes		yes	similar to Ontario Hydro, and research.
Radiation Emitting Devices Testing					
Health and Welfare Canada, Ottawa.	1	laser devic	ces such as r sources and	sources and nicro-wave ovens, d other non-ionizing	Tests on new equipment being manufactured in or imported into Canada, with a view to legislative restriction of such devices.
Ontario Ministry of Labour	1				Health Physics Technical support facilities for inspection and control of X-Rays and other radiation emitting devices in actual use in Ontario. Provincial inspection and control of X-Ray machines is related more to matters such as adequate shielding in walls, elimination of hazards arising from deterioration or owner modifications of the equipment. Federal standards require certain safety devices to be installed at time of manufacture or import, whereas Provincial legislation deals with the manner in which equipment is actually operated.

Sudbury J.T. Donald (Tor., Ham., St. Catherines, Chem Search Private Enviroclean Ltd Dearborn Environmenta Micro-Technics Ltd Enviroclean Ltd Respiratory Services James F. MacLaren-see (London, Willowdale) Widmer Chemical Labs Standard _aboratory Dow Chemicals Companies Technical Service Labs Goodrich Research Found Biological Labs Substance Arsenic (cadmium) antimony etc.) • • • • • • . • . Asbestos • • . . • Benzol . • . . -. • Benzo(a) Pyrene • • • • • Beryllium • • • • . . • • • • Carcinogens • . • • Chlorinated • . 0 • • • • • hydro carbons Coke oven tar • • • volatiles Cotton & other • • • vegetable fibres Cromites • . • . • • • Fluorides . 0 0 • • • • . . Hard metals • • • • • • • . . . (cobalt) Hydrocarbons • • • . • . 0 . . Hydrogen Sulphide . • • • • • • 0 . lonising • . Radiation Isocyanates • . . . 0 . • • . • • • • • Lead • • • Manganese • • • 0 • . . . • • • Mercury • • Mono ethylamine . • • . • . . . & other amines Nickel • • . • • • (carbonyl) Organo-• • • • • • • phosphorus • **PCBs** • • • • • • • . • • Noise* • • • 0 • • Silica • • • Talc • • • • • • Vanadium • Vinyl Chloride . • • • • • • monomer Acrylic Monomers; Solvents; †Fitanium Measurement of arterial blood gases Nitrates; Explosive Gas Concentrates; Various gases. Other **TChromates**

*Also by many companies

Tests Performed by Environmental Laboratories

*Also by many companies	Cardinal Biological Ltd.	Campro (Mississauga and Timmins)	Caleb Brett Canada Ltd.	Bio-Research Labs.	Beck Consultants Ltd.	Private	Ontario Hydro-see Companies-Table II	Natural Resources	Environment	-Mines	M.O.LHealth	Provincial Government		National Health & Welfare-see Section 9	Energy, Mines and Resources-see Section 9	D.C.I.E.Msee National Defence, Section 9	Federal Government	Laboratory
		•	•	•	•				•		•							Arsenic (cadmium) antimony etc.)
									•		•							Asbestos
		•					- 4		•		•		-					Benzol
					•				•									Benzo(a) Pyrene
		Marine State			•				•		•							Beryllium
		•			•				•									Carcinogens
		•	-		•				•									Chlorinated hydro carbons
		•			•				•									Coke oven tar volatiles
		•							•		•							Cotton & other vegetable fibres
		•	•		•				•		•							Cromites
		•	•	•	•				•		•							Fluorides
	•		•	•	•				•		•							Hard metals (cobalt)
ı		•	•	•	•				•		•							Hydrocarbons Hydrogen Sulphide
		•	•		•				•		•							Hydrogen Sulphide
ı					• ited				•									Ionising Radiation
- 1		•			- /-				•	12								Isocyanates
		•	•	•	•				•		•							Lead
	•	•	•	•	•				•									Manganese
	•	•	•	•	•				•		•							Mercury
		• h			•				•		•							Mono ethylamine & other amines
	•	•							•									Nickel (carbonyl)
		•			•				•									Organo- phosphorus
		•			•				•									PCBs
					•				•									Noise*
		•			•				•									Silica
						-			•		•							Talc
		•			•				•									Vanadium
		•			•				•									Vinyl Chloride monomer
	Bacteria	All standard water quality parameters; dry residue analysis; **			Metals, Organic			Metals		Rope Testing						Other		

^{*}Also by many companies
**....Thermal analysis; Infrared and GC Identification.

									_	
Other				Ames Test		Herbicides				ttand other poly- nuclear aromatic hydrocarbons
Vinyl Chloride monomer				•		•		•		
MuibansV			•					•		
Talc				•				•		
Silica				•						
*seioN		•		•			•	•		
bcBs			•	•	,			•	•	•
Organo- phosphorus			•	•		•		•		
(carbonyl)		•		•	-	Pos- sible		•	-	
& other amines				•		T 0			•	
Mercury Mono ethylamine		•	•	•		•		•		
Manganese			•	•		•		•		
Геад		•	•	•				•		
lsocyanates				•		•		•		
noitsibsA								•		
Springle British		•	•	•				•		
Hydrocarbons		•	•	•		•		•	•	•
(cobalt)			•	•		•		•		
Fluorides Hard metals		•	•					•		
Cromites							-	•		
vegetable fibres			•	•						
volatiles Cotton & other				•			-		•	•
hydro carbons Coke oven tar										
Chlorinated			•	•		•		•		•
Carcinogens			•	•		•		•	•	•
Beryllium			•					•		±
Benzo(a) Pyrene			•	•		•			•	+
Benzol		•	•	•		•		•	•	
Aspestos			•					•		
Arsenic (cadmium) antimony etc.)			•	•		•				
Substance										,
Laboratory	Companies	Gulf Oil	Ontario Hydro	Uniroyal	Universities	McMaster	Queen's	Toronto	Waterloo	York







